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Advancing Language Research through Q Methodology

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Content

Contributors

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Adrian Lundberg is a Senior Lecturer at the Department of School Development and Leadership at Malmö University, Sweden, where he completed his PhD in Education. His research focuses on investigating stakeholders' subjective viewpoints about educational issues at the crossroads of multilingualism, equity, and policy. Some of Dr Lundberg's Q-based publications have appeared in *Learning & Instruction*, *Educational Research Review*, and *Current Issues in Language Planning.* He recently acted as a guest editor of two special issues; "Using Q methodology in higher education: opportunities and challenges" in the *International Journal of Educational Research Open* and "Teachers' beliefs about multilingualism: novel findings and methodological advancements" in the *International Journal of Multilingualism.*

Nicola Morea is a Post-Doctoral Research Associate at the University of Reading, United Kingdom. Nicola recently completed a PhD in Language Education at the University of Cambridge. In his doctoral research, Nicola investigated the multilingual identities and beliefs about multilingualism of pre-service teachers in England, exploring new ways in which

Teacher Education and Training providers can prepare future teachers to confidently teach in today's linguistically diverse classrooms. Nicola's research interests include language education, multilingualism and teacher education. Nicola has recently published a Q methodological article in the *Research Methods in Applied Linguistics* journal, titled: "Investigating change in subjectivity: The analysis of Q-sorts in longitudinal research".

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Meihui Wang completed her PhD in language education at Monash University and has worked as an academic fellow there since 2019, participating in a range of language teaching research programs. With over ten years of teaching experience in Chinese language and English as an Additional Language (EAL) in diverse schools in Victoria, she brings a wealth of practical knowledge to her research. Additionally, she is a VCE (Victorian Certificate of Education)

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Foreword

A teaching and learning journey with Q

Joseph Lo Bianco

My first introduction to Q methodology was a chapter devoted to its use in the book *Discursive Democracy: Politics, Policy, and Political Science* by political philosopher John Dryzek.

Reading this volume shortly after its publication in 1990, I was intrigued by the breadth of the claim made for Q, and not merely as a valuable research instrument. Professor Dryzek was concerned about the growth of instrumental rationality in political institutions and in public policy, and how narrow instrumental thinking was percolating into all practice and thinking in democratic contexts. His discussion of Q methodology was in support of a wider process of reconstituting democratic life away from this and towards a more participatory and deliberative alternative.

For Dryzek 'technocracies of expert cultures' can be repressive because they raise barriers to participation by citizens in determining their desired futures. But we are faced with a dilemma. As the problems facing our society become more complex, we need to train more experts to analyse and critique these problems, expertise is essential to understanding the challenges we face and how to solve them. However, as the expertise needed to understand problems becomes more technical and complex, the greater the barriers raised between public understanding and expertise, between experts and the public, and if this continues too long society becomes vulnerable to the appeals of anti-intellectual populism. This prediction was accurate, environmental degradation and climate change, and the vast geo-economic changes transforming the world. One outcome is increased likelihood of dysfunctional policy, or paralysis as decision makers struggle with problems they do not fully understand, and severe contestation takes over where more collaborative and evidence-based decision making is needed. As we grapple with the increasingly complex technological and social problems of today, we can all acknowledge that research and better expertise are essential, but we also need better decision making and deliberative processes to bring new knowledge in accessible form into policy environments to address problems. It is also essential, and this is a related but distinctive problem, to gain the commitment of practitioners, officials, and citizens rather than to merely 'inform' them.

If such concerns were evident in 1990, they are sharply etched today with a very tense geopolitical and strategic environment, the astonishingly rapid impact of the COVID-19 pandemic and other global health crises, very complex debates about Anthropogenic Climate Change, and the revolution in identity formations and debate brought about by globalisation, social media, and other forms of instantaneous communication, not to mention generative AI. We need to know more, and we need more people to know much more, but our democratic systems require us all to jointly decide policy setting regardless of how much we know, and the pipelines linking knowledge and power are clogged.

Dryzek's solution was that our democracy should become more deliberative, and this would require that political institutions be refounded on a communicatively rational kind of decision-making. He called this discursive democracy in which formal and passive citizenship is replaced by active or substantive citizenship, and public discourse becomes vital to our collective life, and expertise is produced in a more collaborative way. Effective communication and improved forms of decision making, and shared knowledge are prerequisites for deliberation, whether on a macro societal scale, or in the smaller scale of individual classrooms, families, municipalities, or professional associations.

In 1990, as today, my concerns were closer to the focus of this book, *Advancing Language Research through Q-Methodology* than to democratic theory, but the cross-over relevance was clear. At the time I was contemplating a PhD in language policy and understanding the reasoning and decision-making processes of politics, policymaking, and procedures of government, are directly relevant concerns, given that language policy has always been contested. With the assistance of Professor Dryzek, I incorporated Q methodology in my own research and it proved invaluable in understanding struggles over the settings and priorities for language policy.

However, Q's promise in language and language education is much broader than policy related questions. Because language teaching and literacy education are fields in which there are regular debates and challenges about method and purpose and in which many individuals and social groups place their hopes for professional improvement, ethnic and cultural continuity, or ideological vindication, Q finds fertile ground. Studies using Q, either exclusively or in conjunction with other methods, have proved remarkably powerful in illuminating these fields, revealing the values, beliefs, and attitudes of protagonists, and pointing the way to collaborative resolution of problems. The rapid changes in the contemporary world, especially vast population movements leading to the growth of multilingual societies everywhere, have opened many issues to the benefits of Q-informed

research. Some other language studies that are promising areas where Q based research has a great deal to contribute are the newly vibrant advocacy for linguistic human rights, and the continuing research revealing close ties between language and social justice, social opportunity, social cohesion. The new knowledge revealed in these areas can be deepened by Q method research, and the links between these new knowledge spaces and practice can be significantly improved and illuminated by Q-informed research.

Since adopting Q-method as preferred research guide, I have had the pleasure of introducing many PhD students, novice researchers, peer researchers and even established researchers to its benefits. This has given me the great pleasure of seeing a huge expansion of Australian studies in language and literacy education that adopt Q as the primary methodology. I am convinced that by incorporating Q methodology established researchers and PhD students alike have added rigour, relevance, and traction to studies that might otherwise have been less interesting. Several are represented in this volume including work by the editors. In all cases Q has delivered the benefits of its unique fusion of richness and rigour, it has enthused those who adopt it through its illumination of the subjectivity of respondents, through its remarkable suppleness, through its ease of implementation and flexibility, and, most importantly, through its unique combination of qualitative and quantitative perspectives.

In speaking at conferences to promote Q or introducing it to language professionals or intending PhD students, I have often felt the need for a volume precisely like this one. The present volume explains and discusses so many aspects of Q and language education, exemplified by a range of studies revealing its potential scope, its limitless application, and its remarkable explanatory power. Five PhDs I have supervised have made excellent use of Q models for studying language phenomena but none of them had available a volume pitched closely to their needs, and now some of them have produced it.

However, even though the research case for Q methodology is compelling, there are other benefits as well, even some not geared to publication or generating new knowledge. Here I will only mention one, a highly innovative use of modified Q, but still inspired by William Stephenson's essential point of inverting factors, and a usage of Q which arose in a highly unusual way, as an effort to ameliorate intense conflict. Dryzek's account of deliberative democracy influenced me in a series of consultancies I undertook for UN agencies in Southeast Asia (Lo Bianco, 2022) to experiment with the sequence of steps and methods in Q to support 'peace building' deliberations on contested issues of language, in ethnic conflict-afflicted settings in Southeast Asia. There were some 45 of these deliberations across Malaysia, Myanmar, and Thailand, over a decade and a half. On at least one occasion participants had

reached an impasse, with deep disagreement on a key policy formulation step, related to how much ethnic language education to permit minority populations. Some alleged this would damage social cohesion, others insisted mother tongue education was a measure of restorative justice and linguistic rights. As facilitator I suggested we 'try something new', and they agreed to collect statements emblematic of their position, and emblematic of the opposing position, which had been made during the four days of our dialogue. We transcribed these onto cards and then all participants ranked and ordered them. I did an informal and rapid factor extraction, and we discussed how to label and describe the various positions, our own and those of others, and progressively through facilitated dialogue we analysed the range of arguments represented, the strength of attachment to them by individual and groupings present among the participants, and progressively mapped our disagreement/agreement profile. The demands of doing this in a physically deprived setting were considerable, but participants approached the task with keen interest for the promise it contained. We collectively (and multilingually) created a Q set, sorted it, informally ranked and measured the viewpoints it contained, visually represented the agreement/disagreement, and talked our way through this, reaching a point of greater understanding and an incipient consensus on some ways forward. If Q sorting in multi-ethnic dialogues characterised by severe resource constraints and internal tension can have this kind of effect and traction, then it truly has more promise than many realise. After this initial trial by necessity, it proved a valuable addition to other methods of facilitating consensus building in conflict-affected settings.

One other encounter with Q that I would like to mention is its use in the multi-country EU project called LUCIDE (Languages in Urban Communities: Integration and Diversity for Europe). I was an external advisor to the multi-city project and recommended adoption of Q methodology to the national teams of researchers from all participating countries, which adopted and implemented it in a range of studies. I ran methods workshops, problem-solving sessions and related activities, and participated in several publications that arose from LUCIDE and policy advisory meetings held in Bulgaria and Poland, and multi-country meetings in London and Dublin. Interested readers will see how effectively these teams incorporated Q methodology to see how municipal institutions and key population groups (civil servants, teachers, interpreters and translators etc) responded to the rapid increase in migration into their cities (King & Carson, 2017).

Q methodology is well described as a research technique for the systematic and careful study of subjectivity, which allows researchers to uncover and assess perspectives individuals hold on a topic. It remains true today that Q is more commonly associated with the discipline

of psychology where it found its first home, and is widely used in several of the social sciences, but its application in language education is proving to be viable, valuable, and vital. In the volume Introduction Fraschini, Lundberg and Aliani cite several review articles that document how Q methodology research is growing in popularity. They investigated the number of Q methodological publications in language research since 2011 and show that there were 73 for calendar year 2022 (as identified in mid-April 2023), including 65 journal articles, five chapters and three books. Figure 1 illustrates this important spike in new material published, and this contrasts dramatically with the one publication in 2011. As more readers encounter the explanatory power of Q methodology increasing numbers will revisit problems or issues they have been researching and many will adopt Q to gain new perspectives on their existing research areas, or branch out into new topics. Both approaches augur very well for a deepening as well as a widening focus for Q methodology, and it is likely the rate of growth in research studies using Q will continue to grow.

Fraschini, Lundberg and Aliani make the important observation that Q methodology has been ahead of its time in theoretical terms. As more researchers embrace ideas from complexity theory and dynamic systems theory there are sound reasons to imagine that the appeal of Q methodology, which does not simplify complex problems but probes them sensitive to the ways in which the subjective dispositions and views of participants shape reality, will also expand. In these two ways, deepening and widening, it is likely that Q methodology research will enjoy a new flourishing in our field of language studies, as it is doing in other fields.

All the chapters in this excellent volume reveal how the scope of Q methodology in language education is growing and spreading. Whether it is in number or depth, every year new topics are explored and the insights into various aspects of language teaching and learning that would once have relied exclusively on case study methods, or quantitative surveys are enriched by that distinctive quality that Q offers. Some key areas in language education in which Q is now commonly applied are:

1. *Assessment of Language and Literacy Programs*: Q methodology has proved popular in assessing the *effectiveness* of language programs, including the design options for curriculum, and different approaches to teaching. Because Q throws light on what program participants believe, it can be especially powerful in identifying the subjective viewpoints of students and teachers on how they experience programs of language and

literacy taught to them, or how they regard the options available, the strengths and weaknesses of various approaches.

2. *Investigating Language Learning Motivation*: Q methodology has proved to be very powerful in revealing teacher attitudes to motivation and in exploring actual motivation of language learners. As learners rank and discuss their motivations for language study, valuable insights into factors that influence learning can be revealed.
3. *Cross-Cultural and Multilingual Studies*: Q methodology has been applied in cross-cultural and multilingual contexts to compare the perspectives of teachers and learners from different linguistic backgrounds. This has been valuable in developing more inclusive and effective language education strategies.
4. *Teacher Training and Development*: Language teacher training programs have used Q methodology to understand the training needs and preferences of aspiring teachers. This helps in tailoring both in-service and pre-service programs to meet specific requirements.
5. *Assessing Language Assessment*: The methodology has been used to evaluate language assessment tools, gauging the opinions of educators and students on the validity and reliability of language tests.
6. *Informing or Evaluating Language Policy*: In contexts where multiple languages are spoken, Q methodology has been used to study language policy implementation and its impact on language education.

The three parts of the present volume open up some new directions while also consolidating past focus areas. In the first part four chapters look at Q methodology in relation to cognition, motivation, identity, and emotions. The settings are Australian and Japanese, family, school, self-study and higher education. The second part also comprises four chapters, set in Australia, China and Switzerland, and expands into both in and pre-service settings examining language teacher beliefs. These beliefs are about multilingualism, cross linguistic issues, motivation, and pedagogy. The third part comprises three chapters, moving into the issue of community interpreter/translator training, the viewpoints of school principals in Australia managing language programs and language program evaluation. To conclude the volume, the editors offer some reflections about the contribution of Q methodology to language research into the foreseeable future.

It is worth noting in conclusion that the innovator and instigator of Q methodology, William Stephenson, had his academic preparation in the early part of the twentieth century,

and combined physics and psychology. It was not until the 1960s and 1970s that Q had gained a significant foothold in the social sciences while retaining its place in psychology. My own first encounter with Stephenson's creation and its unique and productive fusion of perspectives, was via the promise it held for a political philosopher pushing for a more deliberative kind of public sphere. In my own research and research supervision I have deployed and promoted Q methodology into language education, language policy and literacy programming. As the editors have shown in this, our field of language concerns, Q methodology has now planted firm roots and is consolidating its presence, but the outstanding collection of chapters in all parts of this volume show how Q methodology is deepening and widening its presence, in research and increasingly in informing and enlightening practice. The topics addressed, settings for research, scholars and institutions involved and purposes for choosing Q in preference to alternative research methods are all revealed to be vibrant and promising.

It is interesting to reflect on how this all started. On June 28, 1935, a certain W. Stephenson wrote a four-paragraph letter[1] to the Editor of *Nature,* the principal journal of British science. The letter was published on 24 August of the same year. In the letter Stephenson noted that factor analysis was a subject much discussed in the journal, but that factor analysis, he argued, 'can also be inverted' and proceeded to describe how this was to be done. In impressively succinct prose Stephenson noted that this approach "reaches into spheres of work hitherto untouched".

An inversion of what was then standard factor analysis set off a series of reverberations across disciplines, topics, and settings that promises to continue, and language education is likely to be a significant beneficiary as more people join the teaching and learning journey with Q. This volume is a great instalment in that process.

References

Dryzek, J. S. (1990). *Discursive democracy: Politics, policy, and political science*. Cambridge University Press.

Dryzek, J.S., & Berejikian, J. (1993). Reconstructive democratic theory. *American Political Science Review*, 87(1), 48-60.

[1] Published in Q methodology network site on behalf of Steven Brown, Kent State University, USA to mark the 88th birthday of Q methodology.

King, L., & Carson, L. (2017). *Multilingual identities: A study of attitudes towards multilingualism in three European cities*. Languages Company

Lo Bianco, J. (2015). Exploring language problems through Q-sorting. In F. Hult & D. Johnson (Eds), *Research Methods in Language Policy and Planning, a Practical Guide* (pp. 67-80). Wiley-Blackwell.

Lo Bianco, J. (2023). Debating Linguistic Human Rights in Militarised Myanmar: Political Agitation and Policy Deliberation. In T. Skutnabb-Kangas & R. Phillipson (Eds), *The Handbook of Linguistic Human Rights* (pp. 127-143). Wiley Blackwell.

Introduction

Q methodology, subjectivity, and language research

Nicola Fraschini
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Why do language research with Q methodology?

Research into the psychology of language learning has been growing considerably during the past two decades. Once primarily focused on topics such as motivation and Foreign Language Anxiety, it now includes a wide range of psychology-related constructs relevant to language learning and teaching. Advances in the psychology of language learning have been made possible by adopting new research instruments and interdisciplinary theoretical frameworks. This edited volume aims to show how Q methodology, thanks to its technical and theoretical foundations, has the potential to contribute even further to research into the psychology of language learning and many other language-related issues, for example, language policies or educational program evaluation.

Q methodology, in a nutshell, presents a theoretical framework and a statistical technique for the objective study of human subjectivity, and it has been proposed to expand the epistemological diversity in post-social turn Second Language Acquisition (SLA) research (Irie, 2014). However, the full potential that Q methodology has for language research can be better appreciated by locating its meaning within the field of psychology. In a letter submitted to the journal *Nature,* William Stephenson (1902-1989), the creator of Q methodology, mentioned the possibility of using factor analysis in a context where individuals measure a series of tests instead of being measured by these tests (Stephenson, 1935). In other words, he was proposing to factor analyse people instead of questionnaire items, pointing out that this analytical technique would be of great value for the advancement of psychological research. In his view, the "importance of Q-technique lies more in these psychological applications than in any of the statistical devices it employs or represents" (Stephenson, 1953, p. 29).

Considering that Stephenson himself stressed the relevance of the psychological applications over the technical aspects, it would not give justice to Q methodology defining it merely as inverted factor analysis since this is only one of the technical aspects of the methodology. Stephenson earned two doctoral degrees, in physics first and psychology later, and the development of Q methodology was an attempt to bring into the field of psychology

the theoretical innovations brought in physics by Quantum theory (Good, 2003). Stephenson considered psychology to be a matter of human behaviour and suggested that Q methodology "has applications in every branch of psychology where behaviour is at issue, precisely because its concerns is with segments of behaviour, each a marked-off and separate event, to be studied in all its concreteness" (Stephenson, 1953, p. 343). Stephenson understood behaviour not as a simple matter of thinking but also as including an individual's experiences, attitudes, personality, and self-conception (Stephenson, 1953).

Stephenson was critical of "the identification of 'inner' with mind and of mind with unreliability" since this "led to the rejection of subjectivity as worthy of our scientific endeavours. It is, instead, to be the central issue in all psychology" (Stephenson, 1953, p. 93). Therefore, he did not support the Newtonian dualistic division of body and mind and the separation of the psyche from the context (Watts & Stenner, 2003). Instead, he claimed that behaviour "is simply behaviour, whether subjective to a person or objective to others" (Stephenson, 1953, p. 23) and argued that with Q methodology, it is possible to observe at the same time, thanks to multiple conditions of instruction, people's behaviour from inner, outer, and historical probing points.

Q methodology stands on the ground of interbehavioral psychology, which represents for psychology what quantum theory means for physics (Kim, 2008). Like quantum theory, Q methodology applies to a state but not to what is observable within that state (Stephenson, 1982). This state is what Stephenson identified with the concourse, "a random collection of self-referred statements about something" (Stephenson, 1993, p. 5). The concourse is fundamental in Stephenson's psychological system to understand Q methodology under the light of quantum theory. Stephenson (1988, p. 7) postulated that "any psychological event (PE) can be transformed to 'quantumstuff' by a concourse of self-referential statements belonging to the PE". For Stephenson, this means that the statements of a concourse do not have meaning a priori (similarly to the lowest state of energy of an atom). Therefore, the concourse inherently includes any possible disposition. "It is only when the measurements are made", i.e., when the participants sort the statements under a given condition of instruction, "that quantum phenomena appear" (Stephenson, 1988, p. 3). Stephenson (1988, p. 7) also postulated that "operant factor structure for a PE is subject to Bohr's principle of complementarity, providing psychological quanta, the fundamental phenomena in subjective nature", indicating that the factors resulting from a Q methodology study are complementary to each other and reflect different aspects of the same reality (Stephenson, 1983). Ultimately, Q sorts represent probability distributions related to psychological experience, and each statement acquires

meaning after being sorted only in relation to all other statements, not in its individuality (Stephenson, 1983, 1988).[2]

Q methodology can be applied to "almost anywhere in psychology" (Stephenson, 1953, p. 150), and "studies of attitudes, beliefs, religious faith, nationalism, and the like are clearly open to our regard along Q-lines from a subjective standpoint. The study of small social groups is obviously facilitated, whether from 'internal' or from 'external' standpoints. There can be no boundaries between anthropology, social psychology, and subjectivity in the study of men's social behaviour" (Stephenson, 1953, p. 240). Despite its potential to be applied to various fields, Q methodology has often been misunderstood. Stephenson (1980) noted that, in most cases, people fail to see the inductive nature of Q methodology, which implies that in Q methodology hypotheses are not tested but discovered.

Stenner (2022) remarked that more recent critics of the methodology stand on ontological misunderstandings. Whether Q methodology is indeed set to investigate subjectivity objectively, Stenner (2022) notes that subjectivity is not to be understood as made of internal entities or "structured essences in the mind of our participants" (p. 70) but rather as a function, a process. In other words, Q methodology does not set out to unveil personality traits. A further criticism to Q methodology is often moved against the use of a quasinormal forced distribution, but this aspect is fundamental in differentiating Q methodology from traditional psychometric techniques. If in R methodology and traditional psychometric, tests are averaged and grounded in standardisation and norms, then in Q methodology the use of a forced quasinormal distribution changes this and assures that the measurement is the same for all participants, giving a mean score of zero (Stephenson, 1988). In this way "the Q sort scoring gives a description of probability of states (the "new" probabilistics), of what one particular person, for one particular psychological event (PE) feels as pleasure-unpleasure about it" (Stephenson, 1988, p. 5).

Notwithstanding the recognised potential Q methodology has for language research, thanks to its power to focus on the individual and their environment, generate new hypotheses and tackle dynamic, complex and non-Cartesian issues, its application in language research is still limited but growing, as we illustrate further in this introduction. The most recent theoretical advances call for reconsidering many aspects of language research from a complex perspective.

[2] We acknowledge the existence of different opinions regarding the interpretation of the relation between Quantum theory and the psychological grounds of Q methodology, but a discussion of these opinions is beyond the scope of this volume, and therefore we invite the reader to refer to the issue 26 number 4 of the journal *Operant Subjectivity*.

Yet the field, at the same time, also acknowledges the methodological challenges that researchers face in addressing the complexity of people's subjectivity and the variety of their experiences when conducting investigations into individual and societal language use, first and additional language teaching and learning, and language policy. We believe that Q methodology offers a theoretical framework and a data collection and analysis technique to address the aforementioned challenges.

What are the purposes of this volume?

The editors of the volume have benefitted in their Q methodology journey from the regular meetings of the Q Methodology Research Group[3] organised at the University of Melbourne by Renata Aliani. This group, which functions as a community of practice, deals with several aspects of Q methodology by discussing issues brought by individual members. During the meetings, the editors noted that the main hurdles people meet in doing research with Q methodology are both technical and theoretical. Technical aspects deal with the nuts and bolts of the methodology, such as building a concourse, running the factor analysis, or interpreting the resulting factors. This volume does not want to be a book-length introduction to the theory behind Q methodology or a how-to guide to Q methodology as a research application, as these aspects have already been covered extensively and eloquently in the literature. This volume aims to push the boundaries of language education and language policy research, showing how a Q methodological focus on subjectivity offers new and fresh insights into a range of complex and contemporary language related research. In other words, this volume does not aim to show how to do Q methodology in language research, but what can be achieved by using Q methodology in language research.

A further aim of this volume is to explore how Q methodology provides new positions from which to look at language education and language policy research. The investigation of these new positions is not limited to the temporary emic perspectives of the study participants, but is expanded towards how these emic perspectives shift in time and towards their patterns of convergence and divergence. The deep consideration of how perspectives are convergent and divergent, along with what lies in the background of differences and commonalities, inevitably leads towards the generation of new hypotheses, one of the main contributions of Q methodology. Hence, this volume wants to contribute to language research by presenting fresh hypotheses, to be further explored and considered by future research.

[3] www.qdownunder.org

If the main theoretical contributions of this volume can be identified in demonstrating how Q methodology enables language researchers to consider participants' subjectivity and generate new and important hypotheses for the field, a practical contribution lies in showing that Q methodology can be adaptable to different designs. The research questions and the researcher's goal inform the decision on whether to adopt a single condition of instruction at one point in time (see chapters 1, 7, 8, or 11) or at multiple points in time (see chapters 3 and 5), on whether to ask to the same participants to conduct multiple sorts from different perspectives (see chapter 10) or to decide to collect the same type of sorts from different groups of participants (see chapters 2 and 6), or again on whether to use a visual Q sample instead of a textual one (see chapter 4). In doing so all contributors, collectively, demonstrate the flexibility of the Q methodology research design to address dynamic and complex language issues across a variety of educational topics and geographical contexts, and how the methodology can be adapted to inform research that contributes to the local language education and language policy research agenda.

Ultimately, this volume represents a meaningful contribution to language education and language policy related research by providing fresh perspectives from which to address contemporary issues, and by generating new hypotheses from which to jump-start future research explorations that can be conducted with other research techniques.

Situating the volume

Several recent review studies have illustrated the growing popularity of Q methodology in a range of fields (see e.g. Lundberg et al., 2020 in educational research; Churruca et al., 2021 in healthcare research; Hensel et al., 2022 in nursing education studies; Sneegas et al., 2021 on using Q methodology in environmental sustainability research, or Dieteren et al., 2023 who review methodological choices in applications of Q methodology). To situate this volume the editors have collected Q methodological publications in language research, including topics such as individual and societal language use, first and additional language teaching and learning, and language policy. To be included in the collection, the publications needed to be published as either journal articles, book chapters or books after 2010. Moreover, publications were included regardless of the language used and they could have either an empirical or theoretical focus. To date (December 5, 2023), the list features 90 publications, whereof the vast majority of them are journal articles (n=81), followed by six chapters and three books. Figure 1 unmistakingly shows how the current volume is published at a vibrant time regarding Q methodology in language research. Figure 1 also shows a similar picture for Q in language

research as Lundberg et al. (2020) have described for Q publications in educational research or Dieteren et al. (2023) for the field of social science. It seems as Q methodology has gained a momentum, where a critical mass of publications have led to an increased visibility of the approach. We may also assume that more authors working with or at least experiencing Q methodology has led to more journal reviewers (and editors) being knowledgeable about it, which eventually leads to the increased number of publications shown in figure 1. Another reflection from the editors of this volume is the possibility of Q methodology having been ahead of its time regarding theory. Current research trends such as complexity theory or dynamic systems theory provide excellent grounds for studies applying Q methodology (see Fraschini, 2023; Zheng et al., 2020). On a more practical note, the most recent years have also been characterised by a variety of softwares available for Q methodology. Most of them are more user-friendly than their predecessors, which might have attracted a few additional academics. Finally, it can be assumed the global pandemic has had an impact on the number of Q publications. With the use of online applications, Q methodological research can relatively easily be conducted online and without the need to meet participants in person.

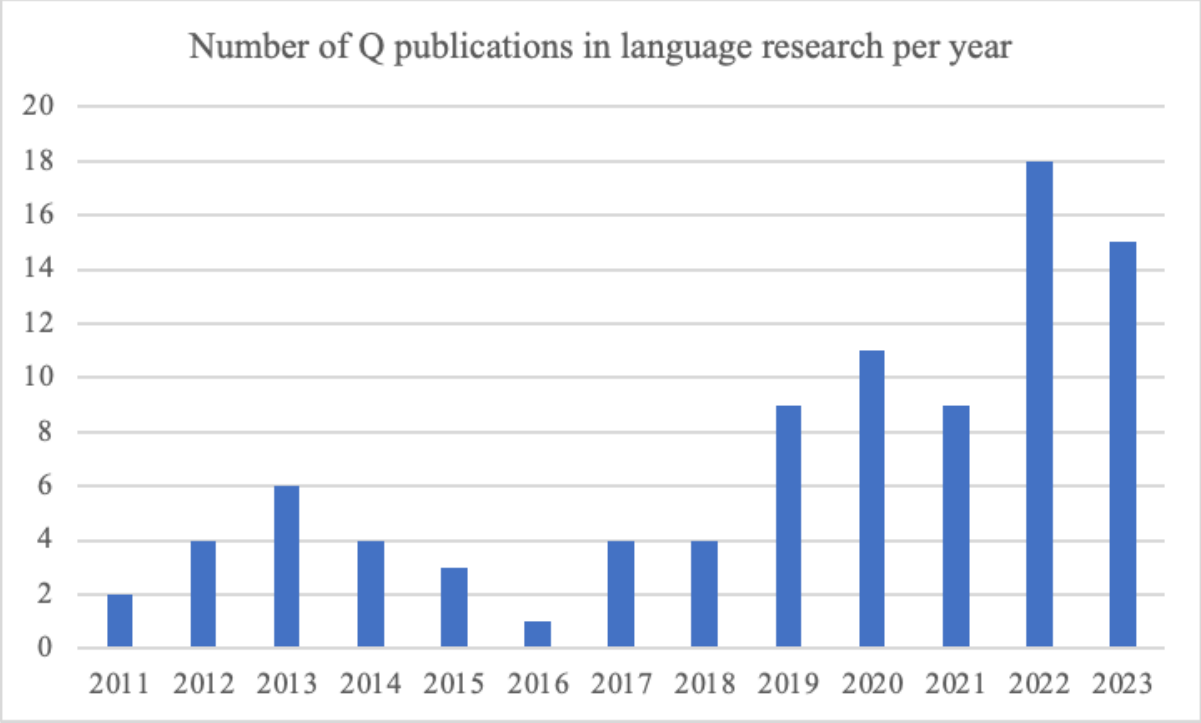

Figure 1. Q publications in language research since 2011, organised by publication year (at December 5, 2023).

To provide a thematic overview of these Q methodological publications, the editors have clustered all articles, chapters, and books according to research topics. Figure 2 visualises how

studies on cognition and motivation dominate the sample. Adding studies focusing on emotion, identity and self-concept, Q methodologies connection to the field of psychology becomes apparent. Part 1 of this edited volume features four chapters that show how Q methodology is used as a window on cognition, motivation, identity, and emotion. The sub-field of teachers' and learners' beliefs, illustrated in part 2, is subsumed in the overarching field of cognition in figure 2. For part 3, we have combined the fields of educational program and school curriculum and language policy and planning. A considerable cluster of publications also describes advantages, disadvantages, and technicalities of Q methodology. These studies are summarised under "research application".

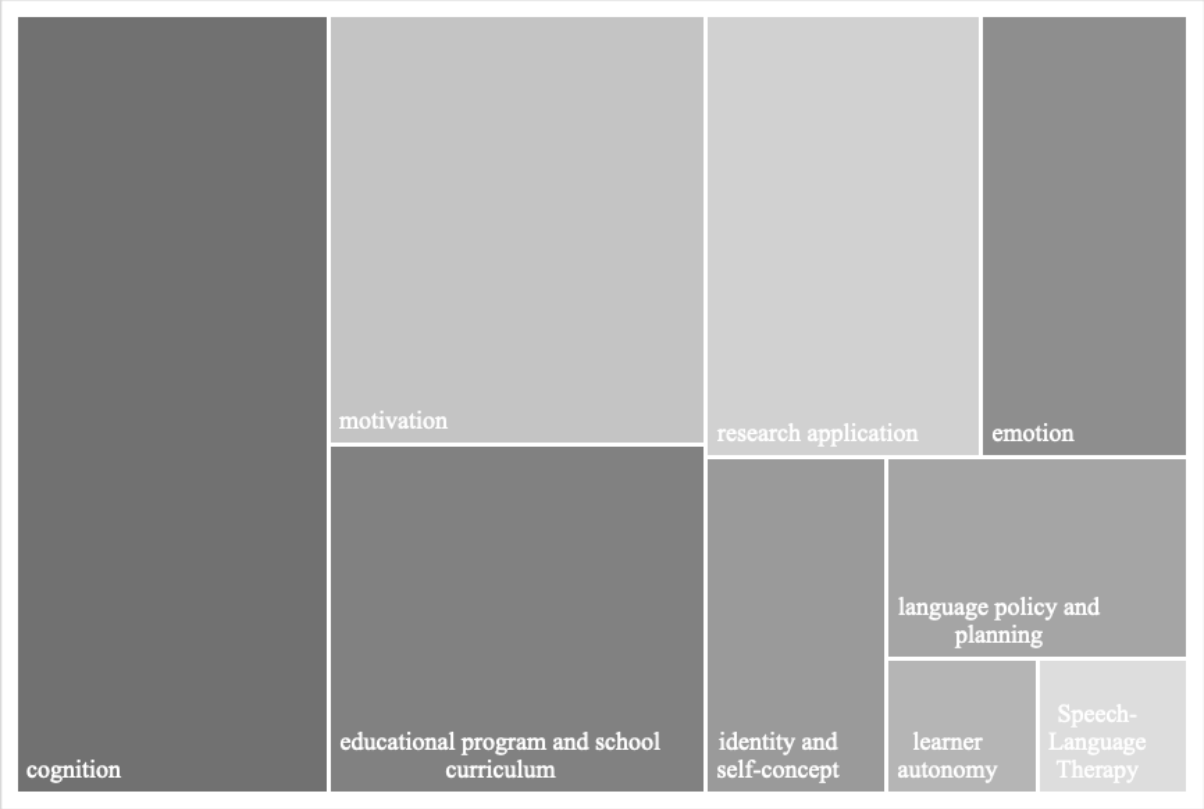

Figure 2. Q publications in language research since 2011, organised by research topics (at December 5, 2023).

Core Q terminology and the Q methodological research process.

With contributions from around the world, by authors with expertise in different research traditions, it seemed important to clarify some of Q methodology's core terminology and main steps of the Q methodology research process.

Table 1 provides an overview of terms that all contributors in this edited volume adhere to. In addition to a definition, we added a column with alternative terminology to facilitate the understanding of Q publications that are not part of this volume. For more in-depth information

on specific terms and concepts, we refer the reader to seminal works, such as Stephenson (1953), Brown (1980), Watts and Stenner (2012), or McKweon and Thomas (2013).

Table 1. Core terminology in Q methodology.

Term	**Explanation**	**Alternative terminology**
Abduction	"A form of logic that begins with the detection of a surprising empirical fact and which then pursues a likely theory or hypothesis to explain that fact" (Watts & Stenner, 2012, p. 45).	
Bipolar factor	A single factor with both positive and negative significant loadings. With several negative significant loadings, a bipolar factor can be split and both views can be interpreted and described.	
Condition of instruction	The instructions given to the participants to follow during Q sorting.	
Concourse	A collection of anything that can be said and communicated about a particular phenomenon.	The universe of subjectivity Corpus of subjective communicability
Consensus statements	Items in the Q sample that are statistically significantly similar across all factor arrays.	
Distinguishing statements	Items in the Q sample that are statistically significantly different across all factor arrays.	
Distribution grid	The usually predetermined, quasi-normal bell-shaped distribution followed to rank the Q sample.	
Factor	A cluster of participants who sorted the Q sample statistically similarly.	When interpreted, a factor is often referred to also as

		"viewpoint" or "perspective"
Factor array	A Q sort based on the weighted average of all flagged sorts per factor.	Composite sort, theoretical sort, model Q sort, opinion profile
Factor interpretation	The iterative procedure of carefully and holistically analysing the patterning of items within a factor array and across different factor arrays. Factor interpretation is usually done with abductive logic.	
Factor loading	The correlation between individual participants' sorts and the potential factor array. A significant loading at $p < 0.01$ is generally calculated with the following formula: $2.58(1/\sqrt{\text{no of items}})$ (Brown, 1980, pp. 222–223).	
Flagged sorts	Representative sorts for particular factors due to their significant factor loading.	Marked sorts Significant sorts
P set	Participants.	Q sorters Sorters
Q method	The procedures of by-person factor analysis (as opposed to by-variable factor analysis in R methodology), including factor extraction (e.g. principal component analysis, Centroid factor analysis) and factor rotation (e.g. Varimax, manual).	Q factor analysis, Inverted factor analysis, by-person factor analysis

Q methodology	"Incorporates a technique for gathering data, a statistical method for analyzing data and a conceptual and philosophical framework that together constitute the basis for a science of subjectivity" (Brown, 2019, p. 567).	
Q sample	A set of stimuli items, representative of the whole concourse. Participants sort the Q sample.	Q set
Q sampling	The process of selecting the Q sample from the concourse.	Q sample design
Q sort	The outcome of a participant's Q sorting and therefore analysable data.	
Q sorting	Data collection through rank-ordering the Q sample.	Data collection exercise/activity
Subjectivity	"The communicability of opinions and perspectives on any topic" (Brown, 2019, p. 569). Note that different conceptualizations of subjectivity within and beyond the Q community emerged in Lundberg et al. (2023).	

The Q methodology process, traditionally, can be divided into five main phases. These are design and preparation of the concourse and Q sample for the study, the collection of the data, the statistical analysis of the sorts, the abductive interpretation of the factors, and the generation of new hypotheses to inform further research. The details of the five steps are visually represented in figure 3.

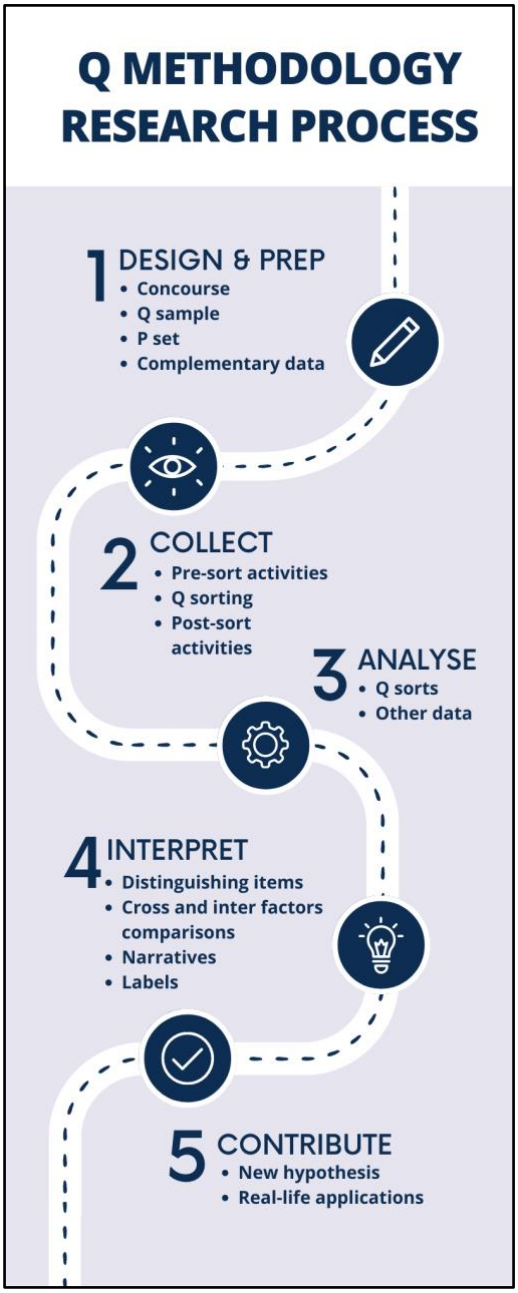

Figure 3. Visual representation of the Q methodological process.[4]

The various stages of Q methodology (figure 3) afford a research framework, techniques for collecting data, methods of analysis and interpretation that allow researchers to study subjectivity in a scientific way. These stages are iterative and may, to varying degrees, comprise several steps.

In the **research design & preparation stage**, a first step once the topic under research has been identified, will generally include the development of a **concourse**, the collection of a

[4] ©Nicola Fraschini, Adrian Lundberg, Renata Aliani via Canva.com

comprehensive number of items that reflect the full range of opinions about the topic. In theory infinite, the concourse includes statements taken from a range of sources which can be naturalistic, from interviews, surveys and focus groups, and ready-made sources such as the media, literature and existing public records, but increasingly items have included visual materials or realia. Another step in this stage is to select from the concourse the **Q sample**, a representative sub-set of between 30 and 50 items, that will be sorted by participants. Researchers will often allocate predefined themes to ensure the selected sample is representative of the concourse and take into consideration a range of criteria such as clarity, redundancy or repetition when making the selection. Researchers will also make decisions about the mode of delivery, the continuum and distribution as well as the condition of instruction under which the participants will perform the sort. Also at this stage, researchers will identify the **P set**, the individuals who will take part in the study and selected because of their relevance to the study. When designing and preparing their Q study researchers might also want to consider the sort of **complementary data** they want to collect before or after the Q sorting activity.

In the **data collection stage**, individuals are asked to rank the items in the Q sample by placing them on the grid in a way that most reflects their subjective view about the topic and with the items they feel most strongly about, in the utmost columns. The **Q sort** is complete once all the spaces in the grid are filled, and participants are happy it represents their thoughts on the topic. Traditionally undertaken face-to-face or with the materials sent by post, Q sorts are increasingly undertaken online. Data collection can also entail **complementary data** collected pre- or post- the Q sort. Information collected before the sort may include demographics or context specific information, while data collected after the Q sorts will often be more qualitative in nature and include asking the participants about the ranking of some items, or their feeling about the Q sorting process.

The next stage in a Q study involves the **analysis** of all completed Q sorts. Many dedicated software packages, such as PQMethod (Schmolck, 2014), PCQ (Stricklin & Almeida, 2010) and KADE (Banasick, 2019), are available to correlate and factor analyse the Q data to ultimately identify a small number of factors. Each factor can be represented by a single factor array/composite sort which characterises the specific point of view held by the participants who load on that factor. Participants who hold a similar view about the topic being researched will share a factor. Once analysed, the complementary data can support and enrich the descriptions of the factors.

The next stage will be that of **interpreting the Q Factors**. Researchers will use the outputs generated in the analysis of the Q sorts to create a description for each factor. Items that have the highest or lowest scores and the distinguishing or consensus items, that is items that statistically differentiate or show similarities between factors, are the ones that will support the researchers in the final stage of a Q study. The interpretation will also be enriched by including quotes and other details gathered in the pre- and post- Q sort activities. A clear and meaningful label describing the essence of each factor can support the interpretation. The final stage is an important aspect which is often overlooked in Q methodology research and consists in **developing new hypotheses** to contribute to further research.

We want to stress that figure 3 illustrates the most conventional Q methodology process, and that variations to this process can be applied to suit specific research needs as the chapters included in this volume demonstrate. These variations may include, as we illustrate in the next section, longitudinal Q sorts, single-case studies, multiple Q samples, multiple conditions of instruction, administered to the same group of participants, visual Q samples, and others.

Structure of the book and summary of the chapters.

The chapters included in this volume offer a broad overview of different applications of Q methodology to investigate language-related issues. Following this introductory chapter, the volume is divided into three parts. The four chapters included in part 1 present how Q methodology is used as a tool to investigate language and cognition and deals with research topics such as language learner motivation, language teacher identity, self-regulated learning, and multilingualism and emotions. The four chapters in part 2 are examples of Q methodology studies used to broaden understanding of language teacher and student-teacher beliefs. The last three chapters included in part 3 illustrate applications of Q methodology for the evaluation of educational language programs, school curricula, and policies.

Chapter 1, by Bonar, Fielding, and Wang, sets out to explore pre-service language teacher identities. The authors argue that pre-service language teachers' identities as language users, language speakers and owners of language are essential to their subject-matter knowledge in the classroom, and therefore understanding the dynamics of identity development is of great importance. The process of learning to teach a language, including the transition in identity from student to teacher, can not only be confronting, but also influenced by how close a relationship a teacher has to that language and how firmly the language is embedded in each individual's linguistic identity. This chapter adopts Q methodology together with qualitative

interviews to present the identity development of pre-service language teachers of a range of languages in Melbourne, Australia. The authors frame the interpretation of the quantitative and qualitative data into a sociocultural approach to identity and, drawing together notions of investment, interaction and socio-cultural connection as the means to developing multilingual identity as an ongoing process, show how pre-service language teachers question their linguistic competence, sociocultural connection to the language, opportunities to interact in the language and investment in building their connection to the language. Q methodology is used here to show the complexity of navigating the borderland spaces between pre-service and in-service language teacher, when multilingual identity is inter-related to subject content knowledge.

In chapter 2, Caruso and Fraschini move away from traditional quantitative investigations of learner motivation and use Q methodology to show the language learning vision of adolescent learners of Korean, Italian, and Chinese language in Western Australian schools. The research context allows the researchers to take into consideration how multicultural and multilingual spaces contribute to adolescent learners' identity and linguistic repertoire and shed light on how Australian high school language learners envision themselves as speakers or the language they study at school. An important feature of the research presented in this chapter is the comparison of students enrolled in lower-high school years and upper-high school years, conducted through a second-order factor analysis, i.e., factors emerging from the analysis of the sorts were further factor analysed. This analysis allows the researchers to conclude that most types of vision are common to both lower-year and upper-year students; however, other types of vision are more strongly associated with one group than the other.

Fukuda, in chapter 3, explores changes in self-regulated learning in a second language (L2) self-study setting. Arguing that self-regulated learning through L2 self-study remains unexplored, she uses Q methodology to identify the salient characteristics of individual learners and the commonalities among groups regarding self-regulated L2 learning in nine Japanese learners, and to show how patterns of self-regulation depend on learners' motivational beliefs. Her Q methodology design is focused on two sessions used to collect data, conducted before and after the L2 self-study periods. The first session reveals that the learners fell into two similar groups, whereas the second reveals they fell into four groups: mastery-oriented, stress-affected, cost-driven, and exam-oriented. The results indicate that all learners understood the value and significance of learning English before they began self-study, which motivated them to undertake it. However, once they started their self-study, their core self-motivational beliefs became evident, leading to the use or non-use of self-regulatory strategies. This suggests that

the learners did not change their attitudes or acquire new strategies; instead, their inherent SRL characteristics became apparent.

Chapter 4 shows an application of Q methodology to a non-instructed language setting. In this chapter, Fraschini and Lundberg set out to use Q methodology as a tool to understand multilingual and multicultural family members' emotions towards their family language policy. The research participants include parents and children of six Australian-Korean families. The researchers, in order to enable young children and members of families living across multiple languages to participate, built a pictorial Q sample, i.e., decided to ask participants to sort emojis instead of statements. The results raise awareness of the complexity of different family language policy strategies and the emotional implications that these policies have for different family members. Furthermore, this chapter shows how Q methodology can be used as a tool to investigate emotions within and across families by including also the perspective of young children.

Chapter 5 opens the part of the book dedicated to teachers' beliefs. In this chapter, Morea takes into consideration the UK context, and observes that despite the recognised need to equip teachers with the knowledge and awareness of multilingualism necessary to move away from a monolingual and assimilationist paradigm, few studies have investigated changes in teachers' beliefs about multilingualism after targeted interventions. He addresses this gap by adopting Q methodology to explore the beliefs about multilingualism of a group of primary and secondary pre-service teachers in England before and after participating in an online course on multilingualism. The pretest-posttest analysis of participant Q sorts reveals a shift in participants' configurations of beliefs, as most pre-service teachers tended to embrace an all-encompassing view of multilingualism after the intervention. The author concludes that identity-oriented interventions may positively influence pre-service teachers' belief formation during teacher education and argues that the current provision on inclusive teaching may be enhanced by integrating a multilingual and identity-oriented element. From a methodological perspective, chapter 5 exemplifies how Q methodology can be applied in pretest-posttest research designs.

Chapter 6 as well focuses on pre-service teachers' beliefs, however the research context is represented by multilingual Switzerland. In this chapter, Chesini and colleagues firstly describe the introduction of a crosslinguistic teacher education curriculum for language teachers for pre-service lower secondary teachers at St. Gallen University of Teacher Education. After, they show how they designed a longitudinal Q methodology study to make visible pre-service teachers' beliefs about plurilingualism and plurilingual education in the

context of this novel educational program, where plurilingualism is not only the subject matter, but also the contents of the modules are taught in a crosslinguistic way. Results show how student-teachers experience plurilingualism in an interdisciplinary context, which can contribute to plurilingual identity development.

In chapter 7 Yuan, while dealing with L2 Chinese teachers' beliefs about motivational teaching, focuses on the importance of integrating post-sort interviews in a Q methodology study. Post-sort interviews are recognized as important elements of Q methodology study; however, more than often post-sort interview excerpts are simply used to supplement the factor interpretation. In this chapter, Yuan argues for the need to give more weight to post-sort interviews. In the first part of the chapter, she focuses on the sorts gathered through Q methodology to explore what teaching beliefs are held by Chinese L2 teachers in Australia with regard to motivating their students. In the second part, the author engages more deeply with post-sort interviews to understand in a more holistic way what contributed to the emergence of these teaching beliefs. The chapter concludes with a discussion of the advantages and disadvantages of post-sort interviews.

Yang and Zhao in chapter 8 focus on the Chinese university context and use Q methodology to investigate overseas returnee teachers' beliefs about bilingual teaching in content-based courses. In Chinese universities, overseas returnee teachers from countries and regions that have adopted English as a Medium of Instruction (EMI) are expected to provide critical support for the implementation of bilingual education policy and bilingual teaching in tertiary content-based classrooms. However, the authors point out that limited knowledge exists about these returnee teachers' beliefs about bilingual teaching in content-based courses, particularly in Asian contexts. In this chapter, they address this gap by using Q methodology and designing a Q sample of statements based on bilingual content-based instruction (CBI) models and practices. Their results contribute to an in-depth understanding and open a discussion on contextual challenges of bilingual teaching in content-based classrooms in non-English-speaking countries.

If the contributions to part 1 and part 2 show how Q methodology can be used to investigate teachers', learners', and language speakers' individual differences, part 3 provides evidence of the efficacy of Q methodology as a tool to evaluate educational programs. This part is introduced by Thumvichit, who in chapter 9 articulates the potential applications of Q in language program evaluations in response to the need for a more holistic and robust method of program evaluation that enables evaluators to identify and address diverse needs effectively. Thumvichit shows practical steps in employing Q for evaluating language programs and

discusses the strengths of Q evaluation, emphasising its unique ability to encapsulate diverse viewpoints and its substantial potential in facilitating enhancements within a language program. This chapter represents a useful reference for those aiming to manage and improve the quality of language programs through Q methodology.

In chapter 10, Park directly applies Q methodology to evaluate the Community interpreters training program offered by the South Korean government. She focuses on the needs of community interpreters, a service mainly offered to migrant-wives from South-East and East Asian countries in South Korea. In her research, Park uses Q methodology to explore how different positions adopted by her research participants, who represent at the same time both providers and recipients of the interpretation service, provide complementary angles from which to evaluate the content of Korean community interpreter translation programs, and therefore contributing with useful suggestions to the improvement of Korean community interpreter and translation courses.

In chapter 11, Aliani investigates the viewpoints about languages education of a group of sixteen principals from Victoria, Australia, in schools where Italian is or was taught. Results indicate the presence of principals who consider learning a language has inherent linguistic, cognitive and cultural benefits, further acknowledging the place of languages education within the primary curriculum. A further group of principals considers whole school support, qualified and linguistically proficient teachers, the use of the target language, time on task and continuity of study, as key elements in the delivery of successful languages programs and, with regards to the choice of language, they prioritise neither Asian nor European languages. As Victorian schools have moved from less rigorous language awareness programs toward languages taught as a separate subject and increasingly toward languages programs that integrate other curriculum content, this research shows how Q methodology can be used to identify the viewpoints of key stakeholders and the significance these viewpoints have on how programs are or could be implemented to be able to provide students with quality languages education.

References

Banasick, S. (2019). KADE: A desktop application for Q methodology. *JOSS: Journal of Open Source Software, 4*(36), art. 1360. doi:10.21105/joss.01360

Brown, S. (1980). *Political subjectivity: Applications of Q methodology in political science*. Yale University Press.

Brown, S. (2019). Subjectivity in the human sciences. *The Psychological Record, 69*, 565-579.

Churruca, K., Ludlow, K., Wu, W., Gibbons, K., Nguyen, H.M., Ellis, L.A., & Braithwaite, J. (2021). A scoping review of Q-methodology in healthcare research. *BMC Medical Research Methodology, 21*, 125.

Dieteren, C. M., Patty, N. J. S., Reckers-Droog, V. T., & van Exel, J. (2023) Methodological choices in applications of Q methodology: A systematic literature review. *Social Sciences & Humanities Open*, 7(1), 1-26.

Fraschini, N. (2023). Language learners' emotional dynamics: Insights from a Q methodology intensive single-case study. *Language, Culture, and Curriculum, 36*(2), 222-239. https://doi.org/10.1080/07908318.2022.2133137

Good, J. (2003). William Stephenson, Quantum theory, and Q methodology. *Operant Subjectivity*, 26(3), 142-156.

Hensel, D., Toronto, C., Lawless, J., & Burgess, J. (2022). A scoping review of Q methodology nursing education studies, *Nurse Education Today,* 109.

Kim. H. (2008). *Q methodology: Philosophical science, theory, analysis, and application*. Communication Books. [Korean]

Irie, K. (2014). Q methodology for post-social-turn research in SLA. *Studies in Second Language Learning and Teaching*, 4(1), 13-32.

Lundberg, A., de Leeuw, R., & Aliani, R. (2020). Using Q methodology: sorting out subjectivity in educational research. *Educational Research Review*, 31. https://doi.org/10.1016/j.edurev.2020.10036

Lundberg, A., Fraschini, N., & Aliani, R. (2023). What is subjectivity? Scholarly perspectives on the elephant in the room. *Quality and Quantity, 57*, 4509–4529. https://doi.org/10.1007/s11135-022-01565-9

McKeown, B., & Thomas, D.B. (2013). *Q methodology*. SAGE.

Schmolck, P. (2014). PQMethod manual. Retrieved from http://schmolck.org/qmethod/pqmanual.htm

Sneegas, G., Beckner, S., Brannstrom, C., Jepson, W., Lee, K., & Seghezzo, L. (2021). Using Q-methodology in environmental sustainability research: A bibliometric analysis and systematic review. *Ecological Economics, 108.*

Stephenson, W. (1935). Technique of factor analysis. *Nature*, 136, 297.

Stephenson, W. (1953). *The study of behavior*. Chicago University Press.

Stephenson, W. (1980). Newton fifth rule and Q methodology: Application to educational psychology. *American Psychologist*, 35(10), 882-889.

Stephenson, W. (1982). Q-methodology, interbehavioral psychology, and quantum theory. *The Psychological Record*, 32, 235-248.

Stephenson, W. (1983). Quantum theory and Q-methodology: Fictionalistic and probabilistic theories conjoined. *The Psychological Record*, 33, 213-230.

Stephenson, W. (1988). The quantumization of psychological events. *Operant Subjectivity*, 12(1/2), 1-23.

Stephenson, W. (1993). Introduction to Q methodology. *Operant Subjectivity*, 17(1), 1-13.

Stenner, P. (2022). Q methodology and constructivism: Some reflections on sincerity and authenticity in honour of Steven Brown. In J. C. Rhoads, D. B. Thomas, & S. Ramlo (eds.), *Cultivating Q methodology: Essays honoring Steven R, Brown*. International Society for the Scientific Study of Subjectivity.

Stricklin, M., & Almeida, R. (2010). PCQ Analysis software for Q-technique. Retrieved from http://www.pcqsoft.com/

Watts, S., & Stenner, P. (2003). Q methodology, quantum theory, and psychology. *Operant Subjectivity*, 26(4), 157-175.

Watts, S., & Stenner, P. (2012). *Doing Q methodological research. Theory, method and interpretation*. SAGE.

Zheng, Y., Lu, X., & Ren, W. (2020). Tracking the evolution of Chinese learners' multilingual motivation through a longitudinal Q methodology. *The Modern Language Journal*, 104(4), 781–803. https://doi.org/10.1111/modl.12672

Appendix

Bibliography of Q publications in language research since 2011.

Alkhateeb, H., Al Hamad, M., & Mustafawi, E. (2020). Revealing stakeholders' perspectives on educational language policy in higher education through Q-methodology. *Current Issues in Language Planning*, *21*(4), 415-433.

Alkhateeb, H., & Alshaboul, Y. (2021). Teachers' understanding of the importance of students' mother tongue (s) in Qatar's international English-medium primary schools: findings from Q method research. *Current Issues in Language Planning*, *23*(1), 37-56.

Alkhateeb, H., Ellili, M., & Al-Lenjawi, B. (2023) Lessons the coronavirus has taught us: One language is not enough. *Asian Englishes.* https://doi.org/10.1080/13488678.2023.2174535

Camenzuli, R., Lundberg, A. & Gauci, P. (2023). Collective teachers' beliefs about multilingualism in Maltese primary education. *International Journal of Bilingual Education and Bilingualism*, 26(4), 379-394. https://doi.org/10.1080/13670050.2022.2114787

Caruso, M., & Fraschini, N. (2021). A Q methodology study into vision of Italian L2 university students: An Australian perspective. *The Modern Language Journal*, *105*(2), 552-568.

Chang, P., & Zhou, L. (2023). Pinpointing the pivotal mediating forces of directed motivational currents (DMCs): Evidence from the Q methodology. *System*, *117*, 103095.

Chang, S. (2020). Exploration of Pre-service Korean Language Arts Teachers' Recognition Type for "Good Written Text" using Q Methodology. *Journal of Cheongram Korean Language Education*, 77, 66-77. http://dx.doi.org/10.26589/jockle..77.202009.6

Chang, S. (2021a). How is the Difference in Recognition for Good Speech Distributed: Classification of subjectivity types by using Q methodology. *Journal of Cheongram Korean Language Education*, 79, 179-222. http://dx.doi.org/10.26589/jockle..79.202101.179

Chang, S. (2021b). Recognition type of Korean language arts teachers for good readers: Applying Q methodology. Journal of Reading Research, 60, 93-121. http://dx.doi.org/10.17095/JRR.2021.60.4

Chang, S. (2021c). Recognition Types of Pre-service Korean Language Arts Teachers for Good Persuasive Writing: Applying Q Methodology. *Writing Research*, 50, 7-38. http://doi.org/10.31565/korrow.2021..50.001

Chang, S. (2022). High school graduates' perception of good conversation. *The Korean Journal of Literacy research*, 13(1), 243-281. https://doi.org/10.37736/KJLR.2022.02.13.1.08

Chang, S. (2023a). Current status and issues of using Q methodology in the field of language education. *Journal of KSSSS*, *62*, 5-25.

Chang, S. (2023b). Classification of subjective perception of pre-service Korean L1 teachers on learner-centered education - based on the theoretical background of "student agency". *Journal of Cheongram Korean Language Education*, *92*, 149-192.

Collins, L., & Angelova, M. (2015). What helps TESOL methods students learn: Using Q methodology to investigate students' views of a graduate TESOL methods class. *International Journal of Teaching and Learning in Higher Education*, *27*(2), 247–260.

Collins, L. J., & Liang, X. (2014). Task relevance in the design of online professional development for teachers of ELLs: A Q methodology study. *Turkish Online Journal of Distance Education*, *15*(3), 268-281.

Cooke, S. (2020). Using Q methodology to examine the effect of imagery training on possible second language selves among basic English users. *Konińskie Studia Językowe*, *8*(2), 121-141.

Cooker, L. (2013). When I got a person to communicate with, I got a purpose to learn": Evidence for social "modes of autonomy. *Chinese journal of applied linguistics*, *36*(1), 29-49.

Damio, S. M., & Hashim, H. (2014). Conceptions of autonomy in language learning from a cultural perspectives using Q methodology. *IIUM Journal of Educational Studies*, *2*(1), 33-45.

Deignan, T., & Morton, T. (2022). The challenges of English medium instruction for subject lecturers: a shared viewpoint. *ELT Journal*, *76*(2), 208-217.

Ding, X., Liu, Y., & Peng, J. E. (2023). Straddling burnout and resilience: a Q methodology study among high school EFL teachers. *Journal of Multilingual and Multicultural Development*, 1-18.

El-Dash, L. G. (2012). Persistência no estudo de inglês na faculdade: um estudo usando metodologia q. *The ESPecialist, 33*(2). 135-152.

Faherty, S. (2016). Using Q methodology to investigate L2 possible selves. *JALT 2015 Focus on the learner*, 152-160.

Fong, E. T. Y. (2021). *English in China: Language, identity and culture*. Routledge.

Fraschini, N. (2020). 'Because Korean is cool' Adolescent learners' vision, motivation, and the study of the Korean language. *Journal of Korean Language Education, 31* (English edition), 37-74.

Fraschini, N. (2023). Language learners' emotional dynamics: insights from a Q methodology intensive single-case study. *Language, Culture and Curriculum*, *36*(2), 222-239.

Fraschini, N., & Caruso, M. (2019). "I can see myself…" AQ methodology study on self vision of Korean language learners. *System, 87*, 102147.

Fraschini, N., & Park, H. (2021). Anxiety in language teachers: Exploring the variety of perceptions with Q methodology. *Foreign Language Annals*, *54*(2), 341-364.

Fraschini, N., & Park, H. (2022). A Q methodology study to explore Korean as a second language undergraduate student-teachers' anxiety. *International Journal of Educational Research Open*, *3*, 100132.

Gale, E. (2011). Exploring perspectives on cochlear implants and language acquisition within the deaf community. *Journal of deaf studies and deaf education*, *16*(1), 121-139.

Gao, L. (2017). Studying the curricular objectives of enhancing legal translation competence by Q-methodology. *Translation and Translanguaging in Multilingual Contexts*, *3*(1), 64-80.

Gao, L. (2019). A two-dimensional hypothetical model for legal translation competence enhancement. *Current Trends in Translation Teaching and Learning E, 6*, 269–305.

Gyenes, A. (2021). Student perceptions of critical thinking in EMI programs at Japanese universities: A Q-methodology study. *Journal of English for Academic Purposes*, *54*, 101053.

Inglis, D., & Pascual, U. (2023). On the links between nature's values and language. *People and Nature*, *5*(2), 326-342.

Irie, K. (2012). Q methodology: A scientifically holistic approach to the study of language learning psychology. *東海大学紀要. 外国語教育センター The bulletin of Foreign Language Center*, Tokai University, (33), 1-13.

Irie, K. (2014). Q methodology for post-social-turn research in SLA. *Studies in Second Language Learning and Teaching*, *4*(1), 13-32.

Irie, K., & Ryan, S. (2014). 20. Study Abroad and the Dynamics of Change in Learner L2 Self-Concept. In Z. Dörnyei, P. MacIntyre, & Alastair Henry (Eds), *Motivational Dynamics in Language Learning* (pp. 343-366). Multilingual Matters.

Irie, K, & Ryan S. (2015). Identifying patterns of changes in self-perception: Q methodology. In *SAGE Research Method Cases Part 1*. SAGE. https://doi.org/10.4135/97814462730501455607 9

Irie, K., Ryan, S., & Mercer, S. (2018). Using Q methodology to investigate pre-service EFL teachers' mindsets about teaching competences. *Studies in Second Language Learning and Teaching*, *8*(3), 575-598.

Jabarooty, M. P. & Lee, J. (2021). Analyzing of the Types of College Students' Perception on Quality English Class. *Journal of Knowledge Information Technology and Systems*, *16*(1), 141-150. https://doi.org/10.34163/jkits.2021.16.1.014

Jing, L. (2020). A Q-methodology based study on tertiary student engagement in mobile-assisted foreign language learning. *Foreign Language World*, 1 (general serial no. 196), 79-87.

Jodaei, H., Zareian, G., Amirian, S. M. R., & Adel, S. M. R. (2018). The interplay of teacher motivation and learner motivation: A Q method study. *Current Psychology*, *40*, 1696-1710.

Kim, S., Fraschini, N., & Park, H. (2023). Defining competencies for training non-native Korean speaking teachers: A Q methodology approach. *International Review of Applied Linguistics in Language Teaching*. https://doi.org/10.1515/iral-2023-0200

King, L., & Carson, L. (Eds.) (2017). *Multilingual identities: a study of attitudes towards multilingualism in three European cities*. The Languages Company.

Kraft, A. (2017). Die Q-Methode: Subjektive Meinungsbilder und ihr Nutzen für Deutsch als Fremdsprache. In N. Hartung and K. Zimmermann (Eds), *Facetten des Deutschen – didaktisch, linguistisch, interkulturell: Festschrift für Ulrich Steinmüller zum 75* (pp. 387-402). Universitätsverlag der TU Berlin.

Kruk, M., Pawlak, M., Shirvan, M. E., Taherian, T., & Yazdanmehr, E. (2022). Potential sources of foreign language learning boredom: A Q methodology study. *Studies in Second Language Learning and Teaching*, *12*(1), 37-58.

Lawton, M., Haddock, G., Conroy, P., Serrant, L., & Sage, K. (2018). Which aspects of the therapeutic alliance are valued by people with aphasia in speech and language therapy? A Q-methodology study. *Aphasiology*, *32*(S1), 122-123.

Lawton, M., Haddock, G., Conroy, P., Serrant, L., & Sage, K. (2020). People with aphasia's perspectives of the therapeutic alliance during speech-language intervention: A Q methodological approach. *International journal of speech-language pathology*, *22*(1), 59-69.

Levitt, R., & Red Owl, R. H. (2013). Effects of early literacy environments on the reading attitudes, behaviours and values of veteran teachers. *Learning Environments Research*, *16*, 387–409.

Li, X. (2022). The significance of Q-methodology as an innovative method for the investigation of affective variables in second language acquisition. *Frontiers in Psychology*, *13*.

Liu, Q., Guo, M., & Lin, R. (2012). A Q methodology-based study on student attitudes towards learning Chinese among non-Chinese major university students in Korea. *Journal of Shenyang Normal University (Social Science Edition)*, *36*(2) (general number 170), 24-28.

Lo Bianco, J. (2015). Exploring language problems through Q-sorting. In F. Hult & D. Cassels Johnson, (Eds), *Research methods in language policy and planning: A practical guide* (pp. 67-80). Wiley.

Lo Bianco, J., & Aliani, R. (2013). *Language planning and student experiences: Intention, rhetoric and implementation* (Vol. 93). Multilingual matters.

Lu, J., Wang, Y., Shen, Q., & Gao, X. (2022). Investment in Learning Chinese by International Students Studying Chinese as a Second Language (CSL). *Sustainability*, *14*(23), 15664.

Lu, X., & Geng, Z. (2022). Faith or path? Profiling the motivations of multilingual Chinese as a foreign language teacher using Q methodology. *Language Teaching Research*, *0*(0).

Lu, X., Zheng, Y., & Ren, W. (2019a). Aprendizaje simultáneo del inglés y el español en China: Una investigación basada en la Metodología-Q sobre la motivación. *Revista signos*, *52*(100), 381-406.

Lu, X., Zheng, Y., & Ren, W. (2019b). Motivation for learning Spanish as a foreign language: The case of Chinese L1 speakers at university level. *CÍRCULO de Linguística Aplicada a la Comunicación*, *79*, 79-98.

Lu, X., Zou, X., & Tao, J. (2020). Spanish language teachers' pedagogical beliefs in Chinese universities. *Círculo de Lingüística Aplicada a la Comunicación*, *84*, 41-53.

Lundberg, A. (2019a). Teachers' beliefs about multilingualism: Findings from Q method research. *Current Issues in Language Planning*, *20*(3), 266-283.

Lundberg, A. (2019b). Teachers' viewpoints about an educational reform concerning multilingualism in German-speaking Switzerland. *Learning and Instruction*, *64*, 101244.

Lutfallah, S., & Buchanan, L. (2019). Quantifying subjective data using online Q-methodology software. *The Mental Lexicon*, *14*(3), 415-423.

Masso, A., Kello, K., & Jakobson, V. (2013). Üleminek riigikeelsele gümnaasiumiõppele: vilistlaste seisukohtade Q-metodoloogiline diskursusanalüüs. *Eesti Rakenduslingvistika Ühingu aastaraamat*, *9*, 161-179.

Mohr, S. (2020a). Assembling concourse material and selecting Q samples on the sociolinguistics of tourism discourse in Zanzibar. *Operant Subjectivity*, *41*.

Mohr, S. (2020b). The 'I' in sociolinguistics: The role of subjectivity in ethnographic fieldwork. *The Mouth: Critical Studies in Language, Culture and Society*, *6*, 101–118.

Mohr, S. (2020c). Language choices among South African migrants in the tourist space of Zanzibar. *Southern African Linguistics and Applied Language Studies*, *38*(1), 60-72.

Morea, N. (2022). Investigating change in subjectivity: The analysis of Q-sorts in longitudinal research. *Research Methods in Applied Linguistics*, *1*(3), 100025.

Nauman, A. D., Stirling, T., & Borthwick, A. (2011). What makes writing good? An essential question for teachers. *The Reading Teacher*, *64*(5), 318–328.

Pan, J., & Lei, J. (2023). Using Q methodology to better understanding subjectivity in EMI. In S. Curle, & J. Pun (Eds.), *Qualitative research methods in English medium instruction for emerging researchers.* Routledge.

Pemberton, R., & Cooker, L. (2012). Self-directed learning: Concepts, practice, and a novel research methodology. In S. Mercer, S. Ryan, & M. Williams (Eds), *Psychology for language learning: Insights from research, theory and practice* (203-219). Palgrave Macmillan.

Peng, J. E., & Wu, L. (2022). Motivational profiles of Chinese university students majoring in Spanish: a comparative study. *Journal of Multilingual and Multicultural Development*, 1-18.

Ramsay, J., Cowell, N., & Gersch, I. (2018). How school staff understand the relationship between problem behaviours and language difficulties. *Educational Psychology in Practice*, *34*(1), 1–25.

Rock, J. (2013). Exploring vocabulary-related epistemological beliefs with Q-methodology. *L'Analisi Linguistica e Letteraria*, *21*(2), 137-154.

Rodriguez, L. A., & Shepard, M. (2013). Adult English language Learners' perceptions of audience response systems (clickers) as communication aides: A Q-methodology study. *Tesol Journal*, *4*(1), 182-193.

Slaughter, Y., Bonar, G., & Keary, A. (2022). The role of membership viewpoints in shaping language teacher associations: A Q methodology analysis. *TESOL Quarterly*, *56*(1), 281-307.

Slaughter, Y., Lo Bianco, J., Aliani, R., Cross, R., & Hajek, J. (2019). Language programming in rural and regional Victoria: Making space for local viewpoints in policy development. *Australian Review of Applied Linguistics*, *42*(3), 274-300.

Sung, P., & Akhtar, N. (2017). Exploring preschool teachers' perspectives on linguistic diversity: AQ study. *Teaching and Teacher Education*, *65*, 157-170.

Thumvichit, A. (2022a). Enjoyment in language teaching: a study into EFL teachers' subjectivities. *International Review of Applied Linguistics in Language Teaching*. https://doi.org/10.1515/iral-2022-0087

Thumvichit, A. (2022b). Illuminating insights into subjectivity: Q as a methodology in applied linguistics research. *Applied Linguistics Review*. https://doi.org/10.1515/applirev-2021-0205

Thumvichit, A. (2022c). Unfolding the subjectivity of foreign language enjoyment in online classes: A Q methodology study. *Journal of Multilingual and Multicultural Development*, 1-18.

Thumvichit, A. (2023a). 'I'm aware of that, but…': breaking the silence on moral distress among language teachers. *Language, Culture and Curriculum, 36*(2), 343-360.

Thumvichit, A. (2023b). Understanding emotion-regulation strategies among foreign language teachers in response to classroom stressors: Findings form a Q methodology study. *Social Psychology of Education.*

Tornwall, J., & McDaniel, J. (2022). Key strategies in scholarly writing instruction for doctor of nursing practice students: A Q-methodology study. *Nurse Education Today*, *108*. https://doi.org/10.1016/j.nedt.2021.105192

Ünsal, F., & Kasap, S. (2023) Investigating English teachers' perceptions of English language education through the Q method. *Shanlax International Journal of education, 11*(4), 15-24.

Vanbuel, M. (2022). How stakeholders see the implementation of language education policy: A Q-study. *Current Issues in Language Planning*, *23*(1), 57-76.

Wang, Y., & Nikitina, L. (2023). A Q Study of Mainland Chinese English Language Learners' Epistemic Beliefs. *rEFLections*, *30*(1), 84-103.

Wang, Y., Nikitina, L., Kaur, J., & Furuoka, F. (2022). Developing and piloting a Q-sample on Chinese language learners' epistemic beliefs. *Journal of Language and Education, 8*(31), 119-132.

Wu, X., & Forbes, K. (2022). Multilingual Identity in Schools: A Q Methodological Study with Chinese LOTE-as-L3 Learners in International and Public High School Contexts. *Journal of Language, Identity & Education*, 1-17.

Wu, X., & Forbes, K. (2023). Contextualising the temporal dimension in multilingual identity construction: A longitudinal Q methodology study with Chinese LOTE-learning public high school students. *System, 116*, 103090.

Yuan, C., & Lo Bianco, J. (2022). L2 Chinese teachers' beliefs about engagement strategies for students in Australia: Findings from Q methodology research. *System*, *106*, 102792.

Zheng, Y., Lu, X., & Ren, W. (2019). Profiling Chinese university students' motivation to learn multiple languages. *Journal of Multilingual and Multicultural Development, 40*(7), 590-604. doi:10.1080/01434632.2019.1571074

Zheng, Y., Lu, X., & Ren, W. (2020). Tracking the evolution of Chinese learners' multilingual motivation through a longitudinal Q methodology. *The Modern Language Journal*, *104*(4), 781-803.

Part 1

Q methodology to open a window on cognition, motivation, identity, and emotions

Chapter 1

Exploring pre-service language teacher identities

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Introduction

While teacher identity has been of interest to researchers for some time, the field's knowledge of language teacher identity, and particularly the experience of pre-service language teachers (PSLTs), is still relatively sparse. This is especially the case for teachers of languages other than English. A review by Kayi-Aydar (2019) of the most influential empirical, conceptual or theoretical publications on language teacher identity contained only three studies out of 42 that included teachers of languages other than English, and only two of those were focused on pre-service teachers (Kayi-Aydar, 2015; Vélez-Rendón, 2010). While some aspects of the research on English language teachers have points of relevance, there are often distinguishing features of teaching other languages that require targeted studies.

PSLTs' identities as language users, language speakers and owners of language are essential to their subject-matter knowledge in the classroom (Andrews & Svalberg, 2017). Understanding the dynamics of identity development that occur within what Alsup refers to as borders of subjectivities, or sense of self (Alsup, 2006), is therefore of great importance. This 'borderland discourse" (ibid, p. xiii) refers to the discourse which reflects negotiation, and often integration, of one's professional and personal self. Historically, the problematic distinction between native-speaker and non-native speaker teachers has been explored to some extent (Árva & Medgyes, 2000; Holliday, 2015), yet our increasingly multilingual societies are much more complex than this simple binary suggests. The process of learning to teach a language, including the transition in identity from student to teacher, can not only be confronting, but is also influenced by how close a relationship a teacher has to that language and how firmly the language is embedded in the teacher's linguistic identity. It is notable that a significant number of PSLTs undergo a crisis of confidence at some stage in their pre-service education relating to their language skills, knowledge, and sense of ownership (Asención Delaney, 2012; Barkhuizen, 2017; Mercer, 2017).

In this chapter we explore the identity development of PSLTs of a range of languages in Melbourne, Australia. Our aim is to gain greater understanding of the nature and formation of pre-service language teacher identity in order to better understand and support PSLTs during their initial teacher education (ITE), their placements in schools, and as graduate teachers of languages.

Literature review

Teacher identity is a rich and dynamic concept that defies simple and absolute definitions (Cheung et al., 2015). Post-structural understandings of language teacher identities (LTIs) position them as complex and in constant flux (Barkhuizen, 2017; Norton, 2013). This complexity is evident in Barkhuizen's summary of the contrasting elements of LTI as:

> cognitive, social, emotional, ideological, and historical - they are both inside the teacher and outside in the social, material and technological world…they are struggle and harmony: they are contested and resisted, by self and others, and they are also accepted, acknowledged and valued, by self and others. They are core and peripheral, personal and professional, they are dynamic, multiple, and hybrid, and they are foregrounded and backgrounded. And LTIs change, short-term and over time—discursively in social interaction with teacher educators, learners, teachers, administrators, and the wider community, and in material interaction with spaces, places and objects in classrooms, institutions, and online (Barkhuizen, 2017, p. 4).

A growing number of researchers also recognise teaching as "identity work" (De Costa & Norton, 2017, p. 7). Fairley (2020) has argued that language teacher education programs should encourage teacher candidates to be involved in a process of transformative, agentive and advocacy-oriented language teacher identity development. The emphasis, Fairley (2020) argues, should be an engagement in ethical self-formation and the promotion of social equity and change. To do so, teacher candidates need to notice, interrogate, and respond to both internal and external tensions that may overlap and influence each other. Internal tensions refer to dissonances between performed identities and imagined identities (Kelly, 2017), while external tensions are those dissonances between claimed identities and ascribed identities (Varghese et al., 2005).

It is evident that while identity has been explored to some extent for in-service language teachers (Cheung et al., 2015), there is a notable lack of prior work specifically looking at pre-

service language teacher identity. One of the few examples was by Liu and Fisher (2006), who investigated UK PSLTs' conceptions of self in four areas: classroom performance, relationships with students, self-image in students' eyes and teacher identity. They found that there are different degrees and patterns of change in the four areas, most notably that PSLTs' teacher identity shows consistent positive change over the one-year span of their pre-service teacher education. Although Liu and Fisher (2006) did not draw direct causal conclusions for the changes, they identified a mix of academic, institutional, and curricular factors along with cognitive, affective and social concerns as prominent factors that induce change in self-conception.

Other relevant research has looked at PSTs attitudes and beliefs, which also shape one's identity. To explore preservice teachers' attitudes and beliefs towards language, Banes et al. (2016) conducted a self-reflexive inquiry into language practices and ideologies with 76 undergraduates representing a range of languages. They found that these future language teachers experienced an interplay between belonging and not belonging as they participated in communities in varied ways. Some students used language to establish a sense of belonging with different social groups while other bilingual students experienced feelings of exclusion. Moreover, the use of 'imperfect' language could mark them as inferior in some settings. These prospective language teachers experienced tensions and shifts in developing language ideologies depending on a given sociocultural context.

Conceptual framework

In seeking to understand PSLT identities, it is therefore clear that a number of identity considerations are particularly salient. Drawing on notions of multilingual identity (Bonar et al., 2022; Fielding, 2021) we propose a conceptual framework (Fig. 1) that integrates the following five elements: i) **language teaching beliefs**; ii) individual ability and opportunity for **interaction** in the language both in the classroom and in the outside word; iii) PSLT **investment** in their own multilingual identity associated with the target language; iv) their related identification as a **L1/LX**[5] user of that language; and v) the associated **socio-cultural connections** that they experience.

[5] LX denotes any additional language learnt after the first language. See following section for more information on L1 user & LX user.

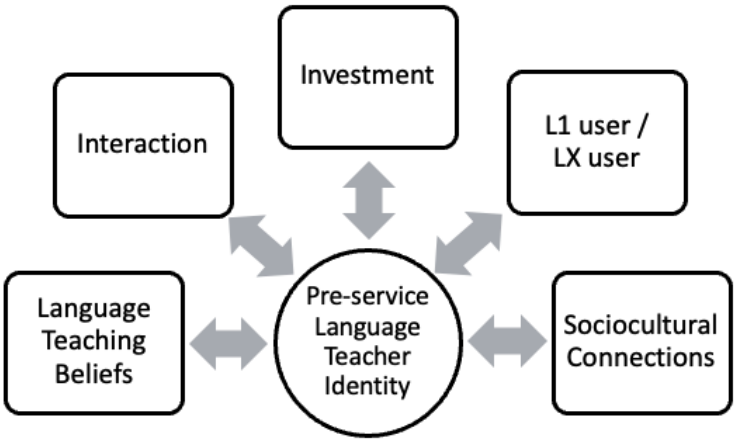

Figure 1. Conceptual framework of language teacher identity.

Language Teaching Beliefs

The concept of language teaching beliefs [sometimes synonymous with teacher cognition (Borg, 2006)] refers to the influence that an individual's language teaching experiences have had on their beliefs about language learning and teaching. Lortie's (2002) influential sociological study of teachers in the 1970s identified the pervasive impact of what he termed the 'apprenticeship of observation'. The many hours spent in schools observing and [un]consciously evaluating the work of their own teachers has a lasting impact on the preconceptions PSTs have about what it means to be a teacher and how pre-service teachers imagine, perform and evaluate their work, including one's beliefs about the classroom as a site of language learning (Song, 2014). A related field of study is teacher language awareness (TLA), which "refers to teachers' cognitions (knowledge and beliefs) about language in general and the language they teach" (Andrews & Svalberg, 2017, p. 219). The main aim of research into teacher language awareness is to explore how these cognitions are developed and the impact they have on teaching and learning.

Interaction

Interaction is a facet of bilingual identity negotiation (Fielding, 2015). The opportunities open to speakers of a language to use that language in interaction has an impact on their self-concept as a speaker of the language. Competent speakers of any language have more power over language choice in interactions (Fielding, 2015). In this way it is a powerful influence on the person's linguistic identity: when they feel able to negotiate and determine the use of language in an interaction, or when a person feels out of control in such a situation. This means that teacher identity associated with language will be impacted by their use of the target language

in their daily lives and their use of the target language in other contexts. The range of contexts will undoubtedly have a relationship to the teacher's self-concept in regard to that language.

Investment

Investment is a core element of an individual's development of identity associated with language (Fielding, 2015). The term investment draws on Bourdieu's notion of cultural capital (Bourdieu, 1998) and acknowledges that individual motivation alone is insufficient for a person to become a member of a new language community as this overlooks the power relationships inherent in existing community members enabling or rejecting new members from joining a language community (Norton, 2013). Norton has shown that it requires a combination of individual motivation and opportunities to develop language proficiency as facilitated by proficient speakers of the new language to lead to identity construction (Norton, 2013). When thinking about language teachers, for teachers who are LX users of the language, their identity associated with the target language (TL) may require sustained and determined involvement with language-speaking communities along with their own individual commitment to develop feelings of competence as a teacher of the TL.

Investment also relates to the teacher's opportunity to maintain and develop language outside of the school context to continue their own relationship with the language. This has ramifications for teacher knowledge of developments in current language and culturally based understandings. Investment is also of importance for L1 teachers of a language as they may still need to invest in ongoing language maintenance if living in an environment where that language is not commonly used in the community.

L1 user – LX user

The commonplace usage of the term 'native speaker'/'non-native speaker' (NS/NNS) disguises the tropes that are assumed within the binary notion that the 'native' teacher emerges from a specific context where the language is spoken as the dominant language, and that linguistic, pragmatic and cultured notions are natural and ingrained. Critiques of the native/non-native binary within the field of English language teaching are extensive, the results of which have drawn attention to the systemic and ongoing prejudices and biases that continue to characterise the ELT landscape (Phillipson, 2010) and how it tends to reproduce essentialised and idealised notions of language users and teachers (Yazan & Rudolph, 2018). Less attention, however, has been paid to NS/NNS ideologies in other languages. Perhaps not surprisingly, the studies that have been conducted suggest that similar dichotomies also characterise how NS and NNS

teachers of all languages are positioned. Wernicke's (2017, 2020) case study of teachers of French in Canada reported a strong orientation to a native-speaker ideal, and this had a significant impact on how non-francophone teachers negotiated their identities as competent language teachers. Studies of the standardised language that is typically found in Spanish language textbooks (Padilla & Vana, 2019; Ros i Solé, 2013) have also brought to light questions of linguistic imperialism and contested notions of ownership of global Spanish (Mar-Molinero & Paffey, 2011). To move beyond the problematic notion of 'native/non-native' speaker in this chapter, we make use of Dewaele's typology (2018) of L1 and LX user in which the link between language and nation state is deemphasised. The choice of language 'user' rather than 'speaker' also avoids excluding users of non-spoken languages such as the numerous sign languages in use today (Schembri, 2010). However, as the native/non-native terminology is still prevalent in the literature and in the language of the pre-service teachers in the interviews, the labels still appear in some statements used in the data collection instruments.

Sociocultural connection

Sociocultural connection is another core component of the development of bi/multilingual identity (Fielding, 2015, 2021). For a language teacher to be confident in their linguistic identity, self-identification as a member of real/imagined linguistic community/ies is essential (Norton, 2013). The connection to the language community may be real or imagined, but nevertheless forms an essential part of the self-concept as a proficient and connected member of a culture associated with the TL. Whilst this impacts on the teacher's identity, it also will then manifest within teaching and teacher decision-making associated with the linguistic and cultural content in the TL.

Methodology

The rationale for using Q methodology in this study was based on three premises. Firstly, this study was exploratory in nature with a goal of understanding how our participants expressed their language teacher identity. While existing literature was useful for informing the concourse, we considered it important that presupposed typologies did not constrain participants from expressing their viewpoint based on the diversity of their personal histories and circumstances. By presupposed typologies we refer to those that typically inform the creation of Likert-style survey instruments in which segmentation is done on the basis of participant background characteristics (ten Klooster et al., 2008). As noted above, research into PSLT is sparse and highly context dependent. In this nascent and complex area of research we

considered it critical that the data collection process did not inadvertently limit the scope for new understandings of language teacher identity to be explored.

Secondly, studying language teacher identity is highly complex and multifaceted, with numerous factors potentially influencing and shaping the formation and expression of these identities. While a purely qualitative approach using in-depth interviews for example has some potential to explore these elements in depth, the idiosyncratic nature of interviews can result in data that may not lend itself to comparative analysis. The benefit of the Q sorting process is that each participant is required to engage deeply with the concepts as expressed in the Q sample, and this creates a focused space for the post Q sort interview to delve more deeply into the various statements as arranged by the participant. This then enables exploration into not only "*how* participants feel and think the way they do, but more importantly *why* there might exist multiple divergent views" (Lundberg et al., 2023, p. 4525, emphasis in original).

The third reason why Q suited the objectives of this study is the longitudinal design of the study and our intention to continue to engage with the participants once they are teaching in schools. Attrition rates for newly-graduated teachers is notably high in Australian schools (Sullivan et al., 2019) and newly-graduated language teachers are subject to the same if not more pressures given the challenges language teachers face in Australian schools (Mason, 2010). The data presented in this chapter is from the first stage of what is planned to be an ongoing and multi-cohort study of pre-service and recently graduated language teachers as they enter the teaching workforce. With the systematic nature of Q sorting and Q method, and the robustness of the methodology even with relatively smaller numbers of participants, it is ideally suited to this longitudinal study of language teacher identity negotiation (see Morea, this volume, for more on longitudinal Q).

Participants

The seven students[6] who volunteered to take part in the research were pre-service teachers of Japanese (LX), Indonesian (LX), German (LX), French (LX), Spanish (L1), and two L1 teachers of Mandarin. In this final year of their four-year undergraduate teacher education course, students are enrolled in two, 12-week courses on language teaching pedagogy to prepare them as future language teachers for Australian secondary schools. All language teachers study together in the course, and it provides them opportunities to work within and

[6] As the participants are studying to become language teachers in a faculty of education initial teacher education course, the labels of student or pre-service teacher are used interchangeably.

across language groups. Language learning is not part of the course as students are either teaching their L1 or have completed tertiary level studies in an LX. There are also entry pathways for students to take a proficiency test in cases where they do not meet those two criteria. During each 12-week course, students generally undertake a placement experience in schools of approximately three to five weeks. For these final year students, this placement requires them to take on significant teaching responsibilities under the guidance of the teacher at the school (the mentor). Due to the COVID-19 pandemic and remote learning conditions, the PSTs who did experience a placement in the first part of 2020 conducted this via online modes. For the second placement in the September-October period, some teachers were also able to spend part of their placement in schools which had returned to on-site teaching.

From concourse to Q sample

The concourse was developed from a combination of salient statements extracted from a literature review and additional comments extracted from transcripts of interviews conducted with each participant prior to the Q sorting phase. The literature review focused on prior research into language teacher identity and pre-service teacher identity. Key themes and issues were extracted from this body of work, and these informed the content and structure of semi-structured interviews conducted with our participants. Each individual interview of between 40-60 minutes with the seven participants was done via Zoom and these were transcribed and then further analysed using NVivo with reference to the themes previously identified in the literature, as well as for any additional themes generated through the discussion. PSLTs' written responses to tasks set during their studies on language teaching were also analysed for relevant comments that could be incorporated into the concourse.

In total, this concourse contained over 80 statements. To make the subsequent Q sort manageable for the participants, these statements were reduced by a process of combining similar statements and excluding unnecessary duplication of the same or similar statements. This resulted in a total of 36 statements spread out under the six themes of **conception of self (CS)**, **interaction (IA)**, **investment (IV)**, **language teaching beliefs (LB)**, positioning as **L1/ LX user (LU)**, and **sociocultural connections (SC)**. Some statements had a more obvious link to a theme – while others could be placed in two or more categories. Themes were for analysis purposes only and not visible to the participants during the sorting process.

To check the clarity of these statements, the Q sample was piloted by two recently graduated language teachers. Based on their feedback, statements 10, 19, 29 and 32 were rephrased for clarity and two further statements (37 and 38) were added to create a final list of

38 statements (Table 2). Due to COVID-19 limitations, the Q sorting was done online using *Q Method Software* (Lutfallah & Buchanan, 2019) and follow-up interviews were conducted via Zoom. Participants were asked to respond to the statements in relation to the following condition of instruction: *When I think of being a language teacher, I believe...*

Data Analysis

Factor analysis was done using KADE (Banasick, 2019). Using principal component analysis and Varimax rotation, a threshold of eigenvalues greater than 1.0 and at least two statistically significant Q sorts (Watts & Stenner, 2012) guided the process of factor identification. After a series of iterations, a three-factor solution with 76 percent explained variance and significant loadings of +/-0.7 for all the seven participants provided the best fit. Table 1 shows the factor loadings (flagged loadings in bold) along with the languages of each participant (L1 and LXs) with the language they intend to teach indicated by *italics*.

Table 1. Participants, their languages and factor loadings.

	Name*	L1	LX	F1	F2	F3
F1	Natalie	*Spanish*	English, French	**0.8419**	0.1092	0.0487
	Yiwei	*Chinese*	English, Korean	**0.8119**	-0.1067	-0.0525
	Elise	English	*French*	**0.6995**	0.0645	0.4677
F2	Claire	English	*German*	-0.1352	**0.8846**	-0.1601
	Ken	Vietnamese	English, *Japanese*	0.2344	**0.8092**	0.3161
F3	Craig	English	*Indonesian*	0.209	-0.2096	**0.8281**
	Ziying	*Chinese*	English	-0.093	0.3228	**0.8339**
	% Explained variance (Total 76%)			28	23	25

Note: italics shows intended target language for teaching; bold indicates flagged loadings.

*pseudonyms

The respective statement position on the sorting grid for each factor is shown in Table 2. The second column labelled *TH* shows the main theme this statement was linked to. These six themes were: conception of self (*CS*), interaction (*IA*), investment (*IV*), language teaching beliefs (*LB*), positioning as L1/ LX user (*LU*), and sociocultural connections (*SC*).

Table 2. Factor array showing statement position on sorting grid for each factor.

	TH	**Statement**	**F1**	**F2**	**F 3**
1	*LU*	I have sufficient language knowledge to teach senior levels.	2	-5	0
2	*IA*	Being able to speak fluently with native speakers is important to me.	0	-1	3
3	*IV*	Students often think language classes are unimportant.	1	-1	-1
4	*LB*	Classroom management is an important part of language teaching.	0	1	0
5	*LU*	Students have lower expectations of teachers who are non-native speakers.	-2	0	-3
6	*SC*	I have reflected on how to teach about culture in my language classes.	-2	1	-1
7	*IA*	I am confident to teach my TL in a classroom.	3	-1	3
8	*IA*	I use my TL in a variety of social contexts.	4	-4	-2
9	*IV*	External language assessments/exams should be used to check a teacher's TL proficiency.	-1	-3	-1
10	*LB*	My primary/high school language teachers seemed to be engaged in improving their language teaching.	-5	0	-1
11	*LU*	Parents regard non-native speakers as inferior to native speakers.	0	2	-3
12	*SC*	Teaching about cultural aspects is very motivating for students.	1	2	2
13	*LB*	My language teacher identity is strongly influenced by my language learning experiences.	-3	3	1
14	*IA*	I feel confident about using my TL in a variety of social contexts.	3	-2	1
15	*IV*	I am highly motivated to continually develop my knowledge of my TL.	1	4	0
16	*LB*	Schools are not the best place to learn languages.	-1	0	1

	TH	Statement	F1	F2	F 3
17	*LU*	It's difficult to understand the culture embedded in a language if it's not your L1.	-1	-3	0
18	*SC*	Maintaining networks for me to use the language regularly is important.	-1	3	5
19	*LB*	Building good relationships with students is the most important thing for a language teacher to teach effectively.	3	5	0
20	*IA*	I feel confident about using my TL in a variety of formal contexts.	2	-4	1
21	*IV*	All students can become successful language users.	1	2	5
22	*LU*	Classroom management is harder for teachers who are non-native English speakers.	-4	-2	-1
23	*SC*	I am confident about integrating language and culture in my teaching.	0	-1	1
24	*SC*	Being multilingual is a strong marker of my identity.	5	2	-4
25	*IA*	I would feel comfortable using the TL anywhere in a school (e.g. staffroom, staff dining area) with other native/non-native speakers.	2	0	4
26	*IV*	Language teaching will be a rewarding career.	2	3	2
27	*LB*	Reflecting on my actions as a language teacher is a high priority for me.	1	5	2
28	*LU*	Native-like pronunciation is the best model for students.	0	-1	4
29	*SC*	It's sufficient for students to just learn about the mainstream culture linked to my TL.	-3	-2	-2
30	*IA*	Using the TL in regular classroom interactions will feel natural to me.	5	-3	3
31	*LU*	Using English is the most effective way to manage the classroom.	-5	1	0
32	*LB*	Most of my primary/high school language teachers were good at teaching.	-4	1	-3
33	*SC*	Learning about culture is optional in language learning.	-3	-5	-5
34	*LB*	Language teachers are respected in schools.	0	1	-2
35	*IV*	My identity changes when I am using an L2.	4	-2	-5
36	*IV*	I need to spend more time developing my TL proficiency.	-2	4	-4

	TH	Statement	F1	F2	F 3
37	*IV*	External language assessments/exams should be used to check a teacher's knowledge of the TL grammar.	-2	0	-2
38	*IV*	I need to spend more time developing my knowledge of TL grammar.	-1	0	2

Interpretation of viewpoints (factors)

The interpretation process involved sequential stages of individual and collaborative analysis of the Q method data and the interview transcripts. Individually each of us examined the three factor arrays with a focus on the statements at the extremities, the distinguishing statements ($p<0.05$), and the participants' interview transcripts. Then collectively we compared our interpretative notes for each factor and integrated these to develop a final description. During this process, we also considered the key characteristics of each factor that made it different from the others, and what were the most salient consensus statements that suggested commonalities across the factors. Within each factor narrative (viewpoint) that follows, the relevant statements are indicated with the statement number and rank position in brackets. Salient quotes from interview data are interspersed to provide additional context and illuminations.

Viewpoint 1

The three participants within this factor were Natalie, Yiwei and Elisa. As with all three factors, there is diversity in the languages they intend to teach and their L1s. Any initial conjecture that shared L1s or LXs would determine which factor participants would load on was not supported by this data. The language teacher identity of these pre-service language teachers does not appear to be strongly tied to their own language learning experiences (13, -3) but rather a reaction against it as they expressed strong disagreement with statements 10 and 32, namely that their language teachers were good at teaching (-4) and seemed to be engaged in improving their own language teaching (-5). This suggests that their identity development has partly been a reaction against their classroom experiences as language learners and shaped more by experience with the language outside of the classroom. Confidence in using the target language (30, +5; 7, +3), was a key marker for this viewpoint. This was also evident in the agreement with statement 1 (*I have sufficient language knowledge to teach senior levels*), which was a

distinguishing statement. When asked to about the placement of this statement, one participant commented that:

> I think because I was recently there, I think if I hadn't done that time in France,... I know a lot of my peers are feeling quite daunted by it and I would be feeling exactly the same, but I'm just really glad that I did that. (Elise)

Their preference for using the TL for classroom management rather than reverting to English (31, -5) and their confidence in using the TL for general classroom interactions (30, +5) were also characteristics of this viewpoint. This also was evident in their strong identification as multilingual (24, +5) and how they are active and confident users (14, +3) of the TL in a variety of formal (20, +2) workplace (25, +2) and social (8, +4) settings.

These PSTs also rejected the idea that culture could be a peripheral aspect of language learning (33, -3), and this extended to teaching the wide range of cultural aspects and not only the mainstream or dominant culture (29, -3). Yiwei elaborated on this by remarking that:

> The language I'm teaching is Chinese. And we all know that China has a rich culture. I feel like it's really important to teach them about the culture with the language. Because when you're learning a language, you need to understand the culture … if they can't understand the culture, they can't understand the language. (Yiwei)

For Natalie, the importance of culture in language teaching also raised questions about a language being linked to a nation state. She explained this perspective by saying:

> For Spanish at least, it's not one culture… it's an opportunity that is missed because... I know a lot of Spanish programs link directly to Spain and when in reality, the language that is spoken in Spain is the least common. (Natalie)

Of interest in this viewpoint is some uncertainty in how to approach this teaching of culture in future classes (6, -2). In Yiwei's case, this hesitancy about how to integrate culture into language teaching seems to be based on an awareness of the breadth, depth and complexity of Chinese culture and her sense of being familiar only with more recent popular culture. For Natalie, on the other hand, this uncertainty stems from the diversity within and between countries where Spanish is spoken as a majority language. Her own experiences as a speaker

of a South American variety of Spanish have made her aware of the tensions that exist when these varieties and their related cultures are not accorded equal status with the language and culture(s) of Spain.

Viewpoint 2

The two participants who loaded on this factor were also pre-service teachers of different languages, though for both of them these languages had been learnt during formal schooling. This viewpoint, composed of the Q sorts of Claire (German LX) and Ken (Japanese LX), has features which contrast significantly to those of viewpoint 1.

While viewpoint 1 did not highly rank the influence of previous language learning experiences (13, -3), in viewpoint 2 these were ranked as influential (13, +3) in shaping their identity. And in contrast to viewpoint 1, these participants expressed a lack of confidence in teaching the TL (1, -5; and 7, -1). An explanation for this may be found in where their language learning experiences had taken place, as they indicated that their language teacher identity was strongly influenced by their language learning experiences in mostly formal education settings (13, +3). After Claire had experienced teaching German while completing her placement in the classroom, she commented on her sense of insecurity as an LX user with the following recollection:

> I feel like the younger year levels thought I knew what I was doing, even though maybe sometimes I questioned myself as a non-native speaker, my pronunciation and stuff but obviously in the younger year levels, they probably wouldn't have been able to tell... At the end of my placement, I sent an email to the Year 12s just saying, "Good luck for your exams." And then I had three of them email me and just say, "Thank you so much for your help." And that just made me really happy because sometimes I just second guess my ability to speak in German and help them. (Claire)

However, their positive responses to statements 27 (+5), 15 (+4) and 26 (+3) suggests a strong commitment to language teaching and a desire to continually improve. Of the three viewpoints this one has the strongest connection to the notion of investment and Ken elaborated on how this lifelong approach to language learning is part of his regular routine:

> It’s just something I really like to do... at the end of the day you're able to see what you're doing in a different dimension, in different ways. So it gives a lot of

> perspective, and it gives a lot of things for me to understand, "Okay, I need to do this in order to improve myself." And ... I'm very... how do I say, I'm very insecure about my level of Japanese. So this reflecting on it also helps me to understand "where should I be able to improve myself? So I know what I did wrong, so then I write down, reflect on it, and I can bring that forward. (Ken)

In these two interview comments it is evident that while Claire and Ken are invested in language learning for both personal and professional motives, there is also a potentially negative element to this as the investment is also fuelled by a sense of inadequacy or lack of authenticity.

Viewpoint 3

As with viewpoint 2, viewpoint 3 consists of two teachers of different languages, though for Craig, Indonesian was a language learnt when starting high school while Ziying will be teaching her first language, Mandarin Chinese. In this viewpoint we can see salient features from the previous two viewpoints that combine to create its distinct characteristics.

As was seen in viewpoint 1, these participants in viewpoint 3 did not highly rate the effectiveness of their own primary and/or high school language teachers (31, -3). Nevertheless (and unlike viewpoint 1) they strongly believe all students can become successful language learners (21, +5). Also, in contrast to viewpoints 1 and 2, these participants express a strong orientation to 'native speaker' as the 'correct' model and benchmark (28, +4; 2, +3). For Ziying this belief stems from her own experiences of learning English as a foreign language in China. She explains that:

> Because I think this is based on my perspective when I was little I was learning English from very Chinglish teacher, which caused my English pronunciation is not very standard, even if I want to correct that I found it was very hard (Ziying)

The use of the term 'Chinglish', often used as a pejorative label for the variety of English spoken or written by Chinese people (Yajun, 2002), suggests that Ziying's concept of a 'standard' pronunciation of English influences her attitude to the models of pronunciation she will be guided by in her teaching of Mandarin Chinese. It is important to note here that as a tonal language with numerous homophones, emphasis on accuracy in producing the tones when

speaking Chinese is usually a prominent feature of Chinese language teaching (Yang & Medwell, 2017).

In relation to identity and multilingual identity, there are clear differences between responses to the relevant statements by these participants compared to those in viewpoints 1 and 2. There was strong rejection of statement 24 (-4) [*Being multilingual is a strong marker of my identity*] and statement 35 (-5) [*My identity changes when I am using an L2*], and both of these were distinguishing statements at $p<0.01$ and for this viewpoint.

Consensus statements

Consensus statements are those that do not distinguish between any pair of factors (non-significant at $p<0.05$). Of note is the consensus of all viewpoints expressed about the value and importance of integrating culture in their future language teaching (33, -3, -5, -5). Not only was there consensus on the potential for learning about culture to be motivating for students (12, +1. +2, +2) each viewpoint expressed disagreement with the suggestion that it is sufficient for students to only learn about the mainstream culture traditionally linked to the target language (29, -3, -2, -2). This perspective was expressed through the interviews by all participants. For those intending to teach their L1, their lived experience of culture in relation to the language and their appreciation and understanding of the diversity within the umbrella notion of culture were very apparent. For those teaching an LX, their own experiences of engaging with intercultural learning either in school-based activities, or extracurricular activities either in local communities of during travel to places where the target language was used, seemed to have made lasting impressions on them and motivated them to replicate these experiences for their future students.

Discussion

The findings indicate a strong consensus on the connections between language and culture(s), but not just the mainstream culture that is commonly linked to a TL. It is significant that several participants indicated that as teachers of a language they feel connected to, they believe it is important to make students cognizant of the heterogeneity within the cultures associated with that language. Several teachers drew on their own experiences to show how they felt strongly about this aspect of language teaching and teaching interculturally. This suggests not only an awareness of diverse experiences of culture tied to each language, but a desire to work towards teaching about this heterogeneity.

Conversely some participants also indicated that feelings of inauthenticity and insufficient proficiency were a concern for them. Even PSTs who may be identified by outsiders as 'native-speakers' still questioned whether their imagined connection to culture was strong enough to teach about it. Therefore, we see that engaging in dialogue in a supportive, non-judgemental environment is an important part of the mentoring of early career teachers and for this to involve identity reflection.

A number of participants indicated strong aversion to replicating the negative experiences they each had in their own language learning. The participants showed a deep level of self-awareness and a valuing of their own potential to remain as ongoing learners about their own teaching. This points to the value in critically reflecting on the 'apprenticeship of observation' (Lortie, 2002) and opening up space for PSTs to reflect on the negative experiences they mentioned from their own formal language learning. Importantly, while some PSTs do experience stress from not feeling adequate in their language proficiency, we posit that this may be a product of unrealistic notions of trying to achieve 'native-like' proficiency, and that mentoring from more experienced teachers may also assist in assuaging this worry for early career teachers.

Counter to possible expectations, the participants within each of the three viewpoints were quite diverse in terms of their L1, their TLs, and their historic and current language learning contexts. This suggests that while a shared TL is one way to consider the needs of PSTs, there are other characteristics of their emerging LTIs that are highly relevant. For educators in initial teacher education and mentors in schools, the shared learning experiences during ITE and then mentoring during placements (and as graduates) may be enhanced by incorporating input from teachers of other languages. Then as graduates transition into full time teaching it will be beneficial to consider how language teachers of diverse languages within schools and networks of schools can act as (informal) mentors. This may also help alleviate the relatively high levels of attrition of early career (language) teachers (Sullivan et al., 2019).

Finally, while there are many similarities in what influences the identity development of pre-service language teachers, the factors that shape these are often highly specific to the individual histories and experiences of each teacher. Therefore, while it is useful to formulate notions that can broadly capture these factors, it is important not to presuppose that these dynamics necessarily work in similar ways at the individual level. This has implications for initial teacher education, school leadership, and ongoing professional learning and mentoring of newly-graduated language teachers. Given the complex interaction between the PST multilingual identity and the subject matter they are teaching, we suggest that the preparation,

induction, mentoring and ongoing professional learning of language teachers needs to be flexible and open to the needs of the individual. Each new pre-service language teacher needs reassurance that there are not predetermined 'types' of language teachers and that their own individual histories and connections to their languages can all be drawn on to empower them in the language classroom. We advocate for an individual identity approach to guide the mentoring of recently-graduated language teachers. An identity approach to PSLT teacher education would also be valuable to begin this reflective journey from initial teacher education onwards.

Limitations

The main limitation was that while the Q sample was designed to be as broadly applicable as possible, the diversity within the language teacher cohort (languages, backgrounds, language learning experiences, teaching contexts etc) means that some statements are less relevant or applicable to some participants. Though statements were worded to make them as relevant as possible to all participants, the diversity of the participants may make such a situation inevitable.

Conclusion

The study underscores the significance of considering language teacher identity (LTI) as a multifaceted and dynamic construct that evolves through complex interactions with various factors. These factors include the individual's language learning experiences, cultural connections, beliefs, and the interplay between their multilingual identities and the languages they teach. In addition to supporting a shift away from the binary distinctions of 'native' and 'non-native', the findings reinforce a de-emphasis of the link between language and nationality. This shift challenges essentialist notions of language and identity, which can perpetuate biases and inequalities in language education.

Furthermore, the study underscores the role of reflective practice in language teacher identity development. The findings suggest that PSLTs benefit from opportunities to critically reflect on their language learning experiences and how these experiences shape their teaching practices. This aligns with sociocultural theories of identity, which emphasize the importance of social interactions, cultural contexts, and reflective processes in identity formation.

Overall, the study contributes to the ongoing discourse on language teacher identity by emphasizing its complexity and highlighting the need for teacher education programs and mentoring practices to acknowledge and support this complexity. It aligns with contemporary

theories of identity that view identity as dynamic, context-dependent, and shaped by multiple factors, including individual experiences, sociocultural contexts, and language-learning trajectories. This theoretical perspective calls for a more inclusive and reflective approach to language teacher development, one that values diverse language backgrounds.

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References

Alsup, J. (2006). *Teacher identity discourses: Negotiating personal and professional spaces.* Routledge.

Andrews, S., & Svalberg, A. M.-L. (2017). Teacher language awareness. In J. Cenoz, D. Gorter, & S. May (Eds.), *Language awareness and multilingualism* (pp. 219–231). Springer. https://doi.org/10.1007/978-3-319-02240-6_17

Árva, V., & Medgyes, P. (2000). Native and non-native teachers in the classroom. *System*, *28*(3), 355–372. https://doi.org/10.1016/S0346-251X(00)00017-8

Asención Delaney, Y. (2012). Research on mentoring language teachers: Its role in language education. *Foreign Language Annals*, *45*(s1), 184–202. https://doi.org/10.1111/j.1944-9720.2011.01185.x

Banasick, S. (2019). KADE: A desktop application for Q methodology. *Journal of Open Source Software*, *4*(36), 1360. https://doi.org/10.21105/joss.01360

Banes, L. C., Martínez, D. C., Athanases, S. Z., & Wong, J. W. (2016). Self-Reflexive inquiry into language use and beliefs: Toward more expansive language ideologies. *International Multilingual Research Journal*, *10*(3), 168–187. https://doi.org/10.1080/19313152.2016.1185906

Barkhuizen, G. (Ed.). (2017). *Reflections on language teacher identity research* (1st ed.). Routledge. https://doi.org/10.4324/9781315643465

Bonar, G. J., Wang, M., & Fielding, R. (2022). Pre-service language teachers' multilingual identities – linking understandings of intercultural language learning with evolving teacher identity. In R. Fielding (Ed.), *Multilingualism, identity and interculturality in education* (pp. 139–157). Springer.

Borg, S. (2006). *Teacher cognition and language education: Research and practice*. Continuum.

Bourdieu, P. (1998). *The state nobility: Elite schools in the field of power*. Polity Press.

Cheung, Y. L., Said, S. B., & Park, K. (Eds.). (2015). *Advances and current trends in language teacher identity research*. Routledge.

De Costa, P. I., & Norton, B. (2017). Introduction: Identity, transdisciplinarity, and the good language teacher. *The Modern Language Journal, 101*(S1), 3–14. https://doi.org/10.1111/modl.12368

Dewaele, J.-M. (2018). Why the dichotomy 'L1 versus LX user' is better than 'native versus non-native speaker'. *Applied Linguistics*, *39*(2), 236–240. https://doi.org/10.1093/applin/amw055

Fairley, M. J. (2020). Conceptualizing language teacher education centered on language teacher identity development: A competencies-based approach and practical applications. *TESOL Quarterly*, *54*(4), 1037–1064. https://doi.org/10.1002/tesq.568

Fielding, R. (2015). *Multilingualism in the Australian suburbs*. Springer. https://doi.org/10.1007/978-981-287-453-5

Fielding, R. (2021). A multilingual identity approach to intercultural stance in language learning. *The Language Learning Journal*, *49*(4), 466–482. https://doi.org/10.1080/09571736.2021.1912154

Holliday, A. (2015). Native-speakerism: Taking the concept forward and achieving cultural belief. In A. Swan, P. Aboshiha, & A. Holliday (Eds.), *(En)Countering Native-speakerism: Global Perspectives* (pp. 11–25). Palgrave MacMillan. https://doi.org/10.1057/9781137463500_2

Kayi-Aydar, H. (2015). Multiple identities, negotiations, and agency across time and space: A narrative inquiry of a foreign language teacher candidate. *Critical Inquiry in Language Studies*, *12*(2), 137–160. https://doi.org/10.1080/15427587.2015.1032076

Kayi-Aydar, H. (2019). Language teacher identity. *Language Teaching*, *52*(3), 281–295. https://doi.org/10.1017/S0261444819000223

Kelly, M. (2017). Second language teacher education. In *The International Encyclopedia of Intercultural Communication* (pp. 1–5). John Wiley & Sons, Ltd. https://doi.org/10.1002/9781118783665.ieicc0050

Liu, Y., & Fisher, L. (2006). The development patterns of modern foreign language student teachers' conceptions of self and their explanations about change: Three cases. *Teacher Development*, *10*(3), 343–360. https://doi.org/10.1080/13664530600922203

Lortie, D. C. (2002). *Schoolteacher: A sociological study* (2nd ed.). University of Chicago Press.

Lundberg, A., Fraschini, N., & Aliani, R. (2023). What is subjectivity? Scholarly perspectives on the elephant in the room. *Quality & Quantity*, *57*, 4509-4529. https://doi.org/10.1007/s11135-022-01565-9

Lutfallah, S., & Buchanan, L. (2019). Quantifying subjective data using online Q-methodology software. *The Mental Lexicon*, *14*(3), 415–423. https://doi.org/10.1075/ml.20002.lut

Mar-Molinero, C., & Paffey, D. (2011). Linguistic imperialism: Who owns global Spanish? In M. Diaz-Campos (Ed.), *Handbook of Hispanic Sociolinguistics* (pp. 747–764). Blackwell. https://eprints.soton.ac.uk/72240/

Mason, S. (2010). Language teacher: To be or not to be. *Babel*. https://search.informit.org/doi/abs/10.3316/ielapa.168966339384233

Mercer, S. (2017). Shifting relations: EFL pre-service teachers' sense of self as a network of relationships. In T. S. Gregersen & P. D. MacIntyre (Eds.), *Innovative practices in language teacher education: Spanning the spectrum from intra- to inter-personal professional development* (pp. 55–77). Springer. https://doi.org/10.1007/978-3-319-51789-6_4

Norton, B. (2013). *Identity and language learning: Extending the conversation* (2nd ed.). Multilingual Matters.

Padilla, L. V., & Vana, R. (2019). Ideologies in the foreign language curriculum: Insights from textbooks and instructor interviews. *Language Awareness*, *28*(1), 15–30. https://doi.org/10.1080/09658416.2019.1590376

Phillipson, R. (2010). *Linguistic imperialism continued*. Routledge.

Ros i Solé, C. (2013). Spanish imagined: political and subjective approaches to language textbooks. In J. Gray (Ed.), *Critical perspectives on language teaching materials* (pp. 161–181). Palgrave Macmillan. https://doi.org/10.1057/9781137384263_8

Schembri, A. (2010). Documenting sign languages. *Language Documentation and Description*, *7*, 105–143.

Song, S. Y. (2014). Teachers' beliefs about language learning and teaching. In M. Bigelow & J. Ennser-Kananen (Eds), *The Routledge Handbook of Educational Linguistics*. Routledge.

Sullivan, A., Johnson, B., & Simons, M. (Eds.). (2019). *Attracting and keeping the best teachers: issues and opportunities*. Springer. https://doi.org/10.1007/978-981-13-8621-3

ten Klooster, P. M., Visser, M., & de Jong, M. D. T. (2008). Comparing two image research instruments: The Q-sort method versus the Likert attitude questionnaire. *Food Quality and Preference*, 19(5), 511–518. https://doi.org/10.1016/j.foodqual.2008.02.007

Varghese, M., Morgan, B., Johnston, B., & Johnson, K. A. (2005). Theorizing language teacher identity: Three perspectives and beyond. *Journal of Language, Identity & Education*, *4*(1), 21–44. https://doi.org/10.1207/s15327701jlie0401_2

Vélez-Rendón, G. (2010). From social identity to professional identity: Issues of language and gender. *Foreign Language Annals*, *43*(4), 635–649. https://doi.org/10.1111/j.1944-9720.2010.01113.x

Watts, S., & Stenner, P. (2012). *Doing Q methodological research: Theory, method and interpretation*. SAGE.

Wernicke, M. (2017). Navigating native-speaker ideologies as FSL teacher. *Canadian Modern Language Review*, *73*(2), 208–236. https://doi.org/10.3138/cmlr.2951

Wernicke, M. (2020). Constructing "other" identities as French second language teacher. In N. Rudolph, A. F. Selvi, & B. Yazan (Eds.), *The complexity of identity and interaction in language education* (pp. 43–61). Multilingual Matters.

Yajun, J. (2002). China English: Issues, studies and features. *Asian Englishes*, *5*(2), 4–23. https://doi.org/10.1080/13488678.2002.10801095

Yang, J., & Medwell, J. (2017). Learners' and teachers' beliefs about learning tones and pinyin. In I. Kecskes (Ed.), *Explorations into Chinese as a Second Language* (pp. 141–163). Springer. https://doi.org/10.1007/978-3-319-54027-6_6

Yazan, B., & Rudolph, N. (2018). Introduction: Apprehending identity, experience, and (in)equity through and beyond binaries. In B. Yazan & N. Rudolph (Eds.), *Criticality, teacher identity, and (in)equity in English language teaching: Issues and implications* (pp. 1–19). Springer. https://doi.org/10.1007/978-3-319-72920-6_1

Chapter 2

Vision and motivation of L2 adolescent learners

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Introduction

The well-documented decline in enrolments in language study at the high school level in Anglophone countries (Kinder et al., 2024; Lanvers et al., 2021; Parrish & Lanvers, 2019) is increasingly compelling scholars and educators from various disciplines to turn their attention to the secondary school sector as a critical arena for inquiry and intervention. In fact, while research on instructed language learning has primarily targeted adult learners, the need to focus on adolescence as not just 'incidental' has now been recognised (Harklau, 2022), but unfortunately, within the body of language learning motivation research, studies on adolescent students represent only a tiny fraction (Zhang et al., 2022). In a recent investigation on the Australian language education landscape (Harvey & Scrimgeour, 2022), learner motivation was identified by high school language teachers as the area they wish to understand the most, the area representing a key concern in their profession, and one with which they need most support. This study is an attempt to answer the recent call for more innovating methodological approaches to investigate language learners' motivation (Dörnyei, 2020), and to give Q methodology broader application, allowing to capture the perspective of the learner in a way attempted by only a few scholars before (see for example Aliani, 2021; Lo Bianco & Aliani, 2013; Zheng et al., 2019, 2020).

Moving away from a more traditional attempt to measure motivation in purely quantitative means, which has been described as narrowing (Dörnyei, 2020), Q methodology was adopted in this study for its potential to address the learner's perspective in a holistic way (Watts & Stenner, 2012), and to show that learner motivation emerges with many shades. The research discussed in this chapter extends our earlier application of Q methodology to language learning vision (Caruso & Fraschini, 2021; Fraschini & Caruso, 2019; Fraschini, 2020), by analysing data on Australian learners of Chinese, Italian and Korean in the Australian secondary school setting. The cultural context of the study is very worthy of investigation. Australian adolescent language students live in multicultural and multilingual spaces that contribute to their identity and linguistic repertoire. This is also reflected in the practise of

referring to ‘foreign/second languages’ as simply ‘languages’ in the curriculum, to emphasise that in Australia the languages studied at school are not ‘foreign’ but belong to one of the numerous multilingual and multicultural communities living in Australia, and therefore can potentially be used *here*, without the need to travel abroad.

Moreover, Australian adolescent students’ personal views of who they are as future speakers of the language they are studying have not yet been fully explored. Therefore, drawing on the concept of vision (Dörnyei, 2009), with this study we aim to provide a new perspective on language learner motivation, by turning our attention to Australian adolescent language learners’ vision. Our conceptualization of motivation, following new research directions, assumes that motivational drives can be set in place by vision, and that its potency is dynamic, socially mediated and changes based on the learners’ experience (Dörnyei, 2020). Our study posits therefore the following main research questions:

RQ1. How do Australian high school language learners envision themselves as speakers of the language they study at school?

RQ2. How are the learners’ visions different between the compulsory and post-compulsory years of secondary school?

RQ3. What hypotheses can we generate about how those visions change overtime?

The first and second questions are in response to the considerable attrition rate visible among language learners in Australian schools (Mason & Hajek, 2020). While our approach does not incorporate a longitudinal dimension in the examination of learners’ motivation, it can provide us with insights about what changes (or does not change) over time, as discussed further below.

Another important contribution of our research, with its focus on learner vision, consists of its implications for the design of language policies guided by a bottom-up approach rather than a top-down approach (Lo Bianco & Slaughter, 2016). Finally, besides illustrating the potential of Q methodology to inform and expand research on language learner vision and contributing new orientations in the study of subjectivity in educational research (Lundberg et al., 2020), this research also has important implications for classroom pedagogy and curriculum development, to counterbalance attrition rates.

Language Education in Australian school

In Australia, the percentage of students taking a language in secondary school has been below 15% for decades (Mason & Hajek, 2020). At which school year, and for how many years a language is compulsory vary from state to state and depend on different educational policies. At the national level, in 2021 only 13.2% of government schools students were learning a language in Year 10, with the percentage dropping to 8.4% in Year 12, the final year of school (Harvey & Scrimgeour, 2022). In Western Australia, where this study was conducted, only 4.3% of Year 12 students continued language study until graduation from secondary school in 2020 (Scagnetti, 2023).

This situation has been explained with reference to several impediments, including a) Australia's persistent unwillingness to value language learning within society, also referred to as monolingual mindset (Clyne, 2005; Hajek & Slaughter, 2014); b) the inconsistent commitment of policy makers to support language education (Scarino, 2014), and c) an emphasis on instrumentalism, which limits the importance of languages to employment and economic value (Lo Bianco & Slaughter, 2009). With reference to this last aspect, earlier work has confirmed that instrumental motivation is not so relevant for tertiary students of Italian at Australian universities (Amorati, 2020; Caruso & Fraschini, 2021; D'Orazzi, 2020), and we argue that the same is true for secondary learners, as is the case in fact for learners in other Anglophone countries (Parrish & Lanvers, 2019). Even when adolescent students are driven by instrumental motivation, this seems to be more linked to their immediate goals (e.g. university entry) than an economic value of language (Curnow et al., 2014). An emphasis on instrumentality can be problematic, since "this type of instrumentalism posits a set of motives that are easy for students who do not envisage a future needing this transactional capital to refute" (Coeffy, 2016, p. 475). Instead, what seems to drive adolescents' language learners is their ability to imagine themselves as language users. Graham et al.'s (2016) study on 14-year-old students of French and German in the UK reveals that increased levels of what is conceptualised in the literature as 'future language self' are associated with continuing language study. This brings us to the theoretical context of our study and the notion of vision.

Vision

The notion of vision is framed within Dörnyei's (2005, 2009, 2020) L2 Motivational Self System (L2MSS). The foundational blocks of the L2MSS lie in motivational psychology, specifically the notion of possible selves, defined as "individuals' ideas of what they might become, what they would like to become and what they are afraid of becoming" (Markus & Nurius, 1986, p. 954). A second fundamental of the model is the power of imagination (Taylor

et al., 1998) and the idea that imagining oneself in the future guides and motivates current behaviour (Kerpelman, 2006). In the L2MSS model, the learner's identity entails the existence of different imagined selves: an ideal self and an ought-to-self. The ideal self is the imagined L2 self of the learner, the image of how the person aspires to be as a speaker of the target language. Within this model, learners will try hard to diminish the gap between their actual self and the ideal future self of a proficient language user, which would translate into a strong form of motivation. The ought-to self refers to the attributes that the learners feel they should meet, based on the perceived expectations placed on them externally, for example by peer groups, parents or other authority figures. Another component of the model is the L2 learning experience, referring to the learners' immediate, or situated, learning environments and experiences.

Vision is considered a mental imagery that the L2 learners have of themselves projected in the future (Dörnyei, 2020; Hessel, 2015; Taylor et al., 1998). Vision drives the motivation to reach those future scenarios and "energise and guide behaviour" (Dörnyei, 2020, p. 115), and it has been explored in previous studies on university language students (Fraschini & Caruso, 2019; Caruso & Fraschini, 2021), calling for further application of the concept to different environments. Fraschini (2020) analysed the Korean subset of the data presented here, providing insights into language-specific factors impacting vision and motivation, but more research is required to capture the complex, subjective views of adolescent learners.

The construct of vision is particularly useful in that it allows for the exploration of factors associated with driving motivation, such as the presence of an openness towards other cultures, also referred to as international posture (Yashima, 2002). Other elements of vision-based motivational drives that have emerged in the literature include the learners' wish to enhance their multilingual skills (Ushioda, 2009; Fraschini & Caruso, 2019), or the presence of a 'rooted L2 self' (MacIntyre et al., 2017), corresponding to a desire to connect to the language speakers, either specific individuals (e.g. grandparents) or the local community.

The learning process itself and how students engage with the many factors of such a process is also central to the students' vision and motivation (Dörnyei, 2019). In their study on students of Italian L2 in Australia, Kavadias et al. (2022) have recently noted that perception of teaching quality and school support play a significant role in determining the students' decision to continue studying the language at school. While different to ours in scope and setting, Wu and Forbes' (2022) study of high school language learners illustrates the influence of the school's stance and ethos in generating sustainable multilingual identities. Parrish and Lanvers (2019) looked at the specific UK school context and concluded that to optimize student

motivation it is necessary to move away from an emphasis on attainment and instead develop policies that treat students the same, with either free choice for all students or compulsory language study for all.

Method

Settings and Participants

Participants in this study were students of Chinese, Italian or Korean enrolled in three different public secondary schools in Western Australia, from lower (Years 7 and 8, respectively 13 and 14 years old children, when language study is compulsory) and upper (Years 10, 11 and 12, respectively 16, 17, and 18 years old children, when language study is elective) years of secondary schooling. The project received Human Research Ethics approval from The University of Western Australia, and the research protocol was approved by the Department of Education of Western Australia. We chose to focus our attention on both European and Asian languages and examine them together because our main concern, given the Australian situation, is on a holistic perspective of languages education in the secondary sector. For the same reason, although we acknowledge that at the individual level the decision to study a language instead of another is often triggered by a language-specific motivation, we analysed together all students of the three languages under consideration.

In Western Australia, while differences exist between the public, private and independent sectors, secondary school language study is now 'mandated' up until Year 8, after which it is a choice subject, therefore we decided to analyse the data per age groups, one including junior students (Years 7 and 8) and the other including the senior students (Years 10, 11 and 12). Students in Year 9 (15 years old children) were not included in the analysis to attempt a clearer investigation of the differences between junior and senior students. The characteristics of the participants are summarised in Table 1.

Table 1. Description of participants.

Lower Years - 60 students (Retained in the Q data analysis results: 42)	Upper Years - 64 students (Retained in the Q data analysis results: 49)
Students of Chinese: 19 Students of Italian: 14 Students of Korean: 9	Students of Chinese: 4 Students of Italian: 32 Students of Korean: 13

Female: 30 Speak a language other than English at home: 13 Have learned another language: 31	Female: 37 Speak a language other than English at home: 23 Have learned another language: 31

From the table above, it is possible to note that the number of sorts collected is slightly higher than many Q methodology studies. This is because it was not possible to give the opportunity only to a limited group of students in a class to participate while preventing others. We are aware of methodological discussions regarding an appropriate number of participants (see Watts & Stenner, 2012); however, if we consider that in Q methodology studies who the participants are is far more relevant to how many they are (Brown, 1980), then we believe that our P set is appropriate.

Q Sample

The concourse for this study was grounded in the literature on motivation and vision, for example the study by Lo Bianco and Aliani (2013) on Japanese and Italian in high school in Victoria, and works carried out in other educational contexts (Absalom, 2011; Coleman et al., 2007). Statements included in our previous studies on Korean and Italian learners (Caruso & Fraschini, 2021; Fraschini & Caruso, 2019) were also drawn from, as well as from our experience and interactions with high school teachers and students. The Q sample was finalised with 47 statements related to engagement with the language learning process, the teacher, the relationship between learner and teacher. Statements included elements of the ideal self, the ought-to self, the learning experience, and also aspects of the possible connections with the local communities of the speakers of that language, to identify what Amorati (2022) has recently defined the community-engaged L2 self. The statements were the same for each target language group but were adapted to refer to the language and country of each separate cohort of students. The statement list is reported in the appendix.

Procedures and Analysis

The Q sorts were collected via an online platform specifically developed for this project at the University of Western Australia, an earlier version of Fraschini et al. (2022). The statements had to be ranked from -5 (most not relevant to me) to +5 (most relevant to me), in a grid representing a quasi-normal distribution.

Students were asked, in the condition of instruction, to sort the statements depending on how much they felt those statements to be relevant to themselves. The Q sorting stage also required the students to indicate preliminary information such as their gender, whether they spoke a language other than English at home and whether they had previously learned or were learning in a school setting another language, beside the one they were studying at school. Upon completing the sort, they were expected to explain briefly – in the form of a written comment – the reason for their selection of the statements at the extreme of the sorting grid. For the analysis, each sort was assigned a code to preserve anonymity.[7]

The sorts collected from the students were subjected to Principal Component Analysis and rotated with Varimax rotation using Ken-Q Analysis v. 1.0.7 (Banasik 2019). The analysis was carried out on the two groups separately (lower years and upper years). Four factors were extracted for the lower year group. One of the factors, Factor 2, resulted bipolar[8] and was split into Factor 2a and Factor 2b. For the upper year group, three factors were extracted. These factor solutions allowed us to include in the results the largest number possible of participants after excluding confounded participants, and participants without a significant loading on any factor, considering a significant loading at +/-.38 with $p < 0.01$.

Our study is not longitudinal since our participants are not the same students who conducted their sorts at two points in time (see Morea, chapter 5, or Fukuda, chapter 3, this volume). Nevertheless, we believe that the two cohorts can provide insights into different (or similar) perspectives that students have at different points of their academic career. In order to explore any major difference among the two groups of students, we conducted a second order factor analysis. As Watts and Stenner (2012) explain, in Q methodology a second order factor analysis is a sophisticated technique that can be used to compare two groups by delivering "a secondary set of super factors that capture any relevant family associations – or, indeed, any relevant differences – between the viewpoints of the two original groups" (p. 54). To conduct the second order factor analysis, we used the factor arrays that resulted from the original analysis, and subjected them to PCA followed by Varimax rotation (see Table 2).

Results

[7] For example, in I04F08YY, I = Italian, 04 = sort n. 4, F = female, 08 = Year 8, Y= speaks only English at home, Y=learned another language other than Italian (or Chinese, or Korean, depending on the student conducting the sort).

[8] A bipolar factor is a factor where one or more participants show a negative loading, i.e., hold an opposite perspective compared to the participants with a positive loading. See also introduction, Table 1.

Lower years

Factor 1. Pride and intercultural understanding.

Fourteen students are associated with this factor. They include seven students of Chinese, four students of Italian and three of Korean. Ten of them are female and four of them are male. The majority of the students, eleven, speak only English at home, but twelve students have learned another language other than English, and the language they are studying at school.

These students seem to be motivated primarily by the sense of pride that their language learning instils in their parents and teachers (32, +5; 33, +5). In the comments, a student explained that it is "because I'd like to be known to my family as being able to speak a different language" (I04F08YY). Students associated with this factor see surrounding people, in the future, praise them for their language skills (38, +3), and see themselves as proud of and satisfied with their linguistic abilities (27, +2).

Students associated with this factor also see themselves able to understand people from other cultures (29, +4) and start friendships with them (22, +3). One of the students associated with this factor, for example, commented that they already had "learnt so much about different cultures, I know a lot of Chinese person(s)" (C09F07YY).

Despite seeing themselves proud and praised for their language skills, students associated with this factor are unlikely to commit to language study beyond their school years (10, -3), either by taking a language subject at university (8, -2) or by doing an in-country study experience (9, -4). Regarding these last aspects, a student commented "I would like to pursue other interests" (C09F08YY). Hence, these students are also unlikely to study the language for their university entrance examination, with one of them adding that "taking the full year 12 uni entrance exam in Chinese is crazy" (C04M08YY).

Factor 2a. A welcome challenge and something cool.

Three students load on this factor. They are: one student of Italian and two of Korean, two female and one male. The two students of Korean only speak English at home, and one of these is the only student to have learned an additional language.

Students associated with this factor lack any long-term vision regarding language study, as what moves them to take language classes are reasons that are more contingent. They are studying a language because of the challenge (46, +5), which therefore makes them look cool (47, +5). This perhaps also explains why they are putting more effort in their language class

than in other subjects (37, +2). Such contingent motivation is further supported by the fact that they like their language teacher (45, +4) and that they probably are also taking the class to be able to stay with their friends (41, +3).

Students associated with this factor apparently do not take classes for the intrinsic advantages of becoming a multilingual speaker, but they treat the language as any other academic subject. For this reason, they are not interested in starting any close friendship relations with speakers of the target language (22, -2), or in visiting the country in the future (3, -5). Considering that they do not plan to study the language for a long time (7, -5), they do not think that they will become more proficient than other people speaking it (15, -3).

Factor 2b. Languages for everyday life.

Factor 2b represents the opposite perspective of factor 2a. Five students are associated with this factor. Three of them are students of Chinese, one is a student of Korean and one is a student of Italian. Three students are male, and two are female. They all speak a language other than English at home, and all but one have learned a language other than the one they are studying.

Students associated with this factor see themselves as long-term language learners (7, +5), and see their future life deeply connected with the language they are studying, and they will be speaking and using it on a daily basis (13, +5). Additionally, these students believe that the language they are studying will likely help them find a job (4, +4), or be used in the workplace (6, +3), thus fostering the pursuit of an international career (5, +3). It is also notable that these students see their aspirations supported by their teacher (35, +4) and parents (34, +4).

Some of the students associated with this factor are background learners of the language; this partially explains why they have long-term commitments to the language. One student explained, "I come from a Chinese background and didn’t want to throw away my culture" (C03M08NN). The presence of background learners may also explain why they do not approach the language as a temporary challenge (46, -4), and instead see it as part of their future life; also, at the same time it explains why they do not see themselves as confident speakers (44, -4), as background learners often underestimate their language competence.

Students associated with this factor clearly study the language following their own will, and therefore are not interested in what people surrounding them may think. An indication of this aspect is in the fact that they do not study the language simply because they like the teacher (45, -1), to ‘follow’ their friends (41, -3), or to get good marks (36, -2). They are not interested

in what other people may say about their language skills (38, -3), or whether learning a language makes them look knowledgeable (43, -2) or cool (47, -5).

Factor 3. Languages for academic success and beyond school.

Eight students are associated with this factor. They include five students of Italian, two of Chinese and one of Korean; six are female and two are male. Three students are background speakers and six have previously learned another language.

Students associated with this factor are academically oriented. They see themselves studying the language to get good marks (36, +5), and pursuing more study of the language within an academic environment, for example by taking the language subject as part of their university entrance examination (31, +5) and then going on to study the language also as a university course (8, +1). Overall, they believe their academic study will equip them with better language skills than most Australians, with one student saying, "I enjoy my Chinese classes and I feel like I speak good Chinese for my age" (C02M08NN).

Although these students see themselves as academically successful learners, they do not consider the language a relevant component of their future life (13, -4). Additionally, they do not even consider living or working abroad (1, -5; 2, -5), with one student reporting "I don't want to work in Italy, I would only go there for tourism" (I05F08YN). This aspect may have been influenced by the young age of the learners, since a different student declared, "I can't see myself living in Italy because I still want to be around my friends and family" (I12F08NY). These students are also not interested in consuming cultural products from the country of the language they are studying (18, -3; 19, -4).

Factor 4. Tourism-attracted, proud achievers.

Twelve students are associated with this factor. Eight of these study Italian, two Chinese and two Korean. Ten are female students and two are male. All students but one speaks only English at home, and eight have learned another language.

Students associated with this factor see themselves using the language mainly for recreational activities. For example, they see themselves visiting the country for tourism (3, +5) and enjoying recreational activities with speakers of the language they are learning (21, +3), and they do not see their parents pushing them to study the language (34, -2). Overall, these students are willing to put some efforts in studying the language (16, +4), although probably no more than other school subjects (37, -3), and they know they will be proud of their language skills (21, +5) but probably not satisfied (27, +1). In other words, they know they will

be good speakers, but they do not aim to reach a high proficiency level. One of the students confirmed that they are just interested in knowing the language to a recreational level by saying "I feel that since I've had the opportunity to learn Italian at school, that it would put to great use when travelling the world and interacting with the local people" (I09F08NY).

As further confirmation that the reason why these students are studying the language is recreational, it is possible to observe that they are not interested in professional outcomes. This includes, for example, working in a job which requires knowledge of the language (6, -5) as could be the teaching profession (11, -5), or working to organise some event related to the culture of the country they are studying (28, -4). In particular, some students are firmly against becoming a teacher, stating "I do not want the career of a teacher" (I08F08YN) or "I don't want to teach" (I11F07YY).

Upper years

Factor 1. Just another subject

Eighteen students load on this factor. Thirteen of them are students of Italian, three are students of Chinese, and two are students of Korean. Six of them speak only English at home, and fifteen of them have learnt another foreign language previously.

Senior students associated with Factor 1 see themselves in the future as a more knowledgeable person (43, +5) and better equipped to understand people from other cultures (29, +3). They take language classes because they enjoy the challenge of learning another language (46, +4) and they think that learning another language is cool (47, +3), but they also acknowledge the positive role that their teacher has in keeping them studying the language (45, +3). For these reasons, these students foresee enjoying further language classes in the future (42, +4), which for them is also a way to develop a better social network of friends (30, +2). They regard themselves successful learners, not only because they see themselves in the future as confident bilingual speakers (44, +5), but also academically, since they think they will get good marks (36, +4) and eventually take the foreign language subject as a component of their university entrance examination (31, +1).

Despite seeing themselves as academically successful learners, these students do not expect to have any first-hand experience of the culture of the language they are learning. They are not interested in working (1, -5), living (2, -4), studying (9, -3), or travelling to the country for tourism (3, -3), or organising events related to the culture they are learning. They are also not interested in developing language skills for any professional purpose (6, -4; 5, -3; 11, -5;

12, -3), and they will not take further classes after their year 12 (7, -2). They also do not see themselves engaging with foreign language material such as magazines or books beyond their school classes (19, -1).

To summarise, students associated with this factor see themselves as academically successful learners but consider the foreign language simply as one among their school subjects, and they do not hold long-term prospects as future speakers of the language.

Factor 2. Culture, travelling, and career

Eighteen students load on this factor. Eight of them are students of Korean, nine are students of Italian, and one is a student of Chinese. Nine of them speak only English at home, and fourteen of them have learned another language previously.

Students associated with Factor 2 are attracted by the culture of the language that they are learning (18, +5; 40, +3), and they see themselves visiting the country for tourism in the future (3, +5). They also think that the language they are learning constitutes a gateway for better job opportunities (4, +3), hopefully for an international career (5, +4).

These students see the language they are learning as a tool for social exchanges, not only because it allows them to be with their friends (41, +1), but mainly because they think it will allow them to establish closer friendship with speakers of that language (22, +4) and enjoy with them recreational activities (25, +3).

Students associated with this factor think that they will speak the language better than most people in Australia (15, +3), but do not consider they will be able to become a confident and fluent speaker (44, -3; 14, -3), and they do not think that other people will praise them for their language skills (38, -2). For this reason, they will not become a role-model for future students (39, -5). However, the language they are learning may help them with learning other foreign languages in the future (17, +4).

Students associated with Factor 2 do not study the language for the challenge (46, -3) or study it harder than other subjects (37, -4). They do not see themselves taking more classes in the future or after graduation (42, -1; 36, 0), or the foreign language subject in the university entrance examination (31, -3). They do not have long-term plans to study the language either because they will not be using it as adults (13, -4) or because their parents will not push them to learn it for longer (34, -4).

To summarise, students associated with this factor, although interested in the culture and in visiting the country, do not share the vision of being long-life learners of the language

and do not see themselves as successful foreign language speakers. As for students associated with Factor 1, their vision as target language learner and speaker is limited in time.

Factor 3. Successful and confident speaker.

Thirteen students load on this factor. Ten are students of Italian, and three are students of Korean. Eleven speak only English at home, and nine have previous experience of learning another language.

Students associated with this factor see themselves as academically successful (36, +4), fluent (14, +5) and confident future speakers of the language that they are learning (44, +4). They may study the language further at university (8, +2), and their language skills will allow them to study in the country (9, +5), also to live there for an extended period (2, +3), and to approach more easily the study of other foreign languages (17, +4). These students are not studying the language simply because they think it is cool (47, -2), and they see themselves as long-term users of the language (13, 0; 10, 0) more than students associated with other factors, although to a minor extent.

The long-term vision of these students does not affect the efforts they put in studying other subjects (37, -4), and it is not influenced by their parents (34, -5) or friends (41, -3), and neither by the desire to expand their social connections to include speakers of the target language (23, -3; 25, -2; 30, -1; 22, 0) or their online social networks (20, -4). These students do not see their language skills improve their ability to understand people from other cultures (29, -2) or foster understanding between Australia and the other country (26, -3), and therefore they do not see themselves actively involved in promoting events related to the culture of the language they are learning (28, -5).

Second order factor analysis.

To understand convergences and divergences among the factors emerging from the two cohorts we conducted a second order factor analysis. Thanks to this technique we were able to identify macro factors, i.e., groups of students with an underlying common vision among the two groups. The results of the second order factor analysis are reported in Table 2.

Table 2. Second order factor analysis, component loadings.

	Macro Factor 1	Macro Factor 2	Macro Factor 3

L1 Pride and intercultural understanding	.830		
L3 Academic success and beyond school	.809		
U1 Just another subject	.700		
L2b Language for everyday life		- .846	
L2a A welcome challenge & something cool		.800	
U3 Successful and confident speaker			.859
L4 Tourism-attracted, proud achievers			.789
U2 Culture, travelling and career			

Note: L and U indicate lower and upper Years respectively.

Three macro factors have emerged, with the perspective highlighted by upper years Factor 2 not loading significatively on any factor. At a first glance it is possible to note that students from the two separate cohorts do load on the same macro factors, highlighting some underlying common visions among the lower years and the upper years students. At the macro-level, macro-factor 1 shows that students loading on the lower year Factors 1 and 3, and upper-year Factor 1 are overall interested in broadening their intercultural understanding through language learning; at the same time, they possess an academic oriented attitude towards the study of the language. Another vision shared by groups of students in both cohorts is that of lower-year Factor 4 and upper-year Factor 3, accounted for by macro-factor 3. Students in these groups see themselves as confident achievers and proud of their language skills; however, at the same time they lack any specific long-term learning vision.

On the other hand, macro-factor 2 highlights visions characteristics of the students of the lower years only. Students in factors L2a and L2b identify opposite visions, with one group of students taking the language subject as an intrinsic personal challenge but lacking any long-term vision, while students in the other group see themselves as long term speakers and using the language on a daily basis. Interestingly, the perspective highlighted by upper-year factor 2, characteristics of students with a strong career orientation, does not load on any factor, and it is not a perspective shared by any group of students in the lower years.

Discussion and Conclusions

The first vision of junior students (Pride and intercultural understanding) reveals a strong presence of an ought-to self in contrast with the upper years' perspectives. While it is impossible to establish whether the ought-to self decreases in relevance as the students progress with their studies, or whether the students with an ought-to self are less likely to continue with their language study, our findings are in line with previous studies that identified a stronger ought-to self in learners in the earlier years of their learning process than in those further ahead (Thompson, 2017). This vision also encompasses the recognition of the value of intercultural understanding, and of its potential for creating connection with speakers of the local communities. A similar ideal self for cultural and personal enrichment also emerges in the first vision of the upper years (F1, Just another subject), without aligning, however, with a commitment for future language study. This commonality is further recognised in the second order factor analysis (macro-factor 1), confirming that the visions of junior and senior students are not clear-cut.

Junior students associated with Factor 2b (Language for everyday life), on the other hand, do envision themselves as long-term speakers of the language, and, interestingly, as speakers of a language that can be used *here* and *now* (eg., with friends, in the community), acknowledging Australia's multiculturalism and multilingual make-up. More generally however, our findings reveal that students lack a long-term multilingual speaker vision, except for the academically oriented. In this respect, we also find confirmation of the important role of aspirations to good grades and academic success for sustaining students' motivation. The prospect of receiving the 'language bonus' for tertiary entrance (Caruso & Brown, 2017) is likely a concomitant element of academic students' visions. One point of contrast is that while the younger learners do not imagine themselves living abroad, the older group's vision does entail a wish for an overseas experience, which can be explained with reference to their more advanced psychological development (Harklau, 2022).

The relevance of enjoyment in language learner motivation (e.g. Absalom, 2011; Curnow et al. 2014) also emerges in our data (L4, Tourism, pride and enjoyment). Emotions, such as enjoyment, have also been linked to the role of the teacher (Fraschini & Tao, 2021; Fraschini, 2023), supporting Fraschini's (2020) earlier study where the teacher is a major element of the environment to sustain learning and motivation. In our study the visions of the older learners exclude interests in the language teaching career, possibly implying, as already commented, a certain distance from the teacher as a role-model for future occupations.

In conclusion, this study shows that the visions of Australian high school language learners tend to lack a commitment to future language study. Some visions do encompass long-

term study prospects in association with academic success or cultural background, but more generally the speaker visions of Australian adolescents who took part in this study are limited in time, and this applies also to students who value cultural development and career prospects. In terms of differences between lower (compulsory) and upper (non-compulsory) years, the second order factor analysis shows that the visions of junior and senior students are not necessarily clear-cut. At the same time our findings allow us to hypothesise a decrease in relevance of external pressures (parents, teachers) as students move from compulsory to non-compulsory study, and possibly aspire to *be* proud of their own skills, rather than to *make* someone proud. The recognition of the value of languages for intercultural growth, on the other hand, unites junior and senior students, illustrating their openness to culture. While in our data openness to culture does not align with long-term study scenarios, it is possible that for some senior students the motivation to pursue upper-level study may have derived (also) from an enduring desire for intercultural competence. Further research is necessary to ascertain the place of intercultural understanding in adolescents' visions and its value in sustaining their motivation. As for instrumental motivation, unsurprisingly, only some of the senior students envision themselves benefiting from language study in terms of career, emphasising once again the need for positioning languages away from economic benefits and into the sphere of personal growth, enjoyment and real-life communication (Kavadias et al., 2022).

Other important pedagogical implications emerge from the study. One relates to the need to capitalise on the recognition of the value of languages for cultural openness and engage students with suitable and practical activities. The second implication concerns background learners and the importance of supporting them, ensuring that the current policy does not discourage them from continuing studying a language (Cruickshank & Wright, 2016). Promoting a shift from attainment to real-life applications of the language continues to be a great challenge for educators but may well be the necessary response to support adolescent language learners and ultimately turn the clock for language study in Australia.

References

Absalom, M. (2011). 'Where have all the flowers gone?': Motivating continuation of languages in secondary school. *Babel*, *46*(2/3), 12-19.

Amorati, R. (2022). Community presence, motivation, and identity: The community-engaged L2 Self of university students of Italian in Melbourne. *Australian Review of Applied Linguistics*, *45*(3), 299-321.

Amorati, R. (2020). Drawing upon disciplinary knowledge to foster long-term motivation: Implementing future L2 selves in the Australian tertiary L2 classroom. In J. Fornasiero, S. Reed, R. Amery, E. Bouvet, K. Enomoto, & H. L. Xu (Eds.), *Intersections in language planning and policy* (pp. 335–351), Springer.

Aliani, R. (2021). Sì, tanti ma non bilingui: Using Q methodology to examine Italian language teaching in primary schools. *Unpublished doctoral dissertation). University of Melbourne, Melbourne, Australia*.

Banasick, S. (2019). KADE: A desktop application for Q methodology. *JOSS: Journal of Open Source Software, 4*(36), art. 1360. doi:10.21105/joss.01360

Brown, S. (1980). *Political subjectivity: Application of Q methodology in political science*. Yale University Press.

Caruso, M., & Brown, J. (2017). Continuity in foreign language education in Australia: The language bonus plan. *Australian Review of Applied Linguistics*, *40*(3), 280-310.

Caruso, M., & Fraschini, N. (2021). A Q Methodology study into vision of Italian L2 university students: An Australian perspective. *The Modern Language Journal*, *105*(2), 552-568.

Clyne, M. G. (2005). *Australia's language potential*. University of New South Wales Press.

Coleman, J. A., Galaczi, Á., & Astruc, L. (2007). Motivation of UK school pupils towards foreign languages: a large-scale survey at Key Stage 3. *Language Learning Journal*, *35*(2), 245-281.

Cruickshank, K., & Wright, J. (2016). A tale of two cities: What the dickens happened to languages in NSW? *Australian Review of Applied Linguistics*, 39, 72–94.

Curnow, T., Kohler M., Liddicoat A., & K. Loechel, (2014). Review of Languages Retention from the Middle Years to the Senior Years of Schooling (Adelaide: Research Centre for Languages and Cultures (UniSA)

Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Routledge.

Dörnyei, Z. (2009). The L2 motivational self system. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 9– 42), Multilingual Matters.

Dörnyei, Z. (2020). *Innovations and challenges in language learning motivation*. Routledge.

D' Orazzi, G. (2020). University students' demotivation in learning second languages: The case of Australian universities. *International Journal of Literacy, Culture, and Language Education*, *1*, 28-53.

Fraschini, N. (2020). 'Because Korean is cool'. Adolescent learners' vision, motivation, and the study of the Korean language. *Journal of Korean Language Education*, *31* (English edition), 37-74.

Fraschini, N. (2023). Language learners' emotional dynamics: insights from a Q methodology intensive single-case study. *Language, Culture and Curriculum, 36*(2), 222-239. https://doi.org/10.1080/07908318.2022.2133137

Fraschini, N., Paterson, C., Celebrado, B. Tan, A. Ai, J. Poovathanickal, E. Zhong, W. & Blagden, L. (2022). Q Sort Collection App (v1.0.1). Zenodo. https://doi.org/10.5281/zenodo.6950897

Fraschini, N., & Caruso, M. (2019). "I can see myself…" AQ methodology study on self vision of Korean language learners. *System*, *87*, 102147.

Fraschini, N., & Tao, Y. (2021). Emotions in online language learning: exploratory findings from an ab initio Korean course. *Journal of multilingual and multicultural development*, 1-19.

Graham, S., Courtney, L., Tonkyn, A., & Marinis, T. (2016). Motivational trajectories for early language learning across the primary–secondary school transition. *British Educational Research Journal*, *42*(4), 682-702. https://doi.org/10.1002/berj.3230

Hajek, J., & Slaughter, Y. (Eds.). (2014). *Challenging the monolingual mindset* (Vol. 156). Multilingual Matters.

Harklau, L. (2022). *Adolescent Second Language Learning and Multilingualism*. Oxford University.

Harvey, N., & Scrimgeour A. (2022). A comparative profile of language education in Australian schools. MLTAWA State Conference, Shifting Paradigms in Languages Education, 29-30 July 2022.

Hessel, G. (2015). From vision to action: Inquiring into the conditions for the motivational capacity of ideal second language selves. *System*, *52*, 103-114.

Kavadias, K., Amorati, R., & Hajek, J. (2022). On their way to university? Understanding tertiary students' experience of Italian language study at secondary school. *Italian Studies*, 1-20.

Kerpelman, J. L. (2006). Using Q methodology to study possible selves. In C. Dunkel & J. Kerpelman (Eds.), *Possible selves: Theory, research and applications* (pp. 163–186). Nova Science Publishers.

Kinder, J., Fraschini, N., & Caruso, M. (2024). Resilience, renewal, and revival: Language teaching in the 2020s. In J. Kinder, N. Fraschini, & M. Caruso (eds.), *Enabling Learning: Language Teaching for Australian Universities*. ANU Press.

Lanvers, U., Thompson, A. S., & East, M. (Eds.). (2021). *Language learning in Anglophone countries: Challenges, practices, ways forward*. Springer Nature.

Lo Bianco, J., & Aliani, R. (2013). *Language planning and student experiences: Intention, rhetoric and implementation* (Vol. 93). Multilingual matters.

Lo Bianco & Slaughter (2009). *Second languages and Australian schooling*. Australian Council for Educational Research.

Lo Bianco, J., & Slaughter, Y. (2016). The Australia Asia project. In G. Leitner, A. Hashim and H.-G. Wolf (eds), *Communicating with Asia: The future of English as a global language* (pp. 296-612). Cambridge University Press.

Lundberg, A., de Leeuw, R., & Aliani, R. (2020). Using Q methodology: Sorting out subjectivity in educational research. *Educational research review*, *31*, 100361.

MacIntyre, P. D., MacKay, E., Roxx, J., & Abel, J. (2017). The emerging need for methods appropriate to study dynamic systems: Individual differences in motivational dynamics. In L. Ortega, & Z. H. Han (Eds.), *Complexity theory and language development: In celebration of Diane Larsen-Freeman* (pp. 96–122). John Benjamins.

Markus, H., & Nurius, P. (1986). Possible selves. *American psychologist*, *41*(9), 954.

Mason, S., & Hajek, J. (2020). Language education and language ideologies in Australian print media. *Applied Linguistics*, *41*(2), 215-233.

Parrish, A., & Lanvers, U. (2019). Student motivation, school policy choices and modern language study in England. *The Language Learning Journal*, *47*(3), 281-298.

Scagnetti, E. (2023), Preliminary findings. A study on perceptions towards Italian in WA education. WAATI (Western Australian Association Teachers of Italian) conference, 25 January 2023.

Scarino, A. (2014). Situating the challenges in current languages education policy in Australia–unlearning monolingualism. *International Journal of Multilingualism*, *11*(3), 289-306. https://doi.org/10.1080/14790718.2014.921176

Taylor, S. E., Pham, L. B., Rivkin, I. D., & Armor, D. A. (1998). Harnessing the imagination: Mental simulation, self-regulation, and coping. *American psychologist*, *53*(4), 429.

Thompson, A. S. (2017). Don't tell me what to do! The anti-ought-to self and language learning motivation. *System*, *67*, 38-49.

Ushioda, E. (2009). A person-in-context relational view of emergent motivation, self and identity. *Motivation, language identity and the L2 self*, *36*, 215-228.

Watts, S., & Stenner, P. (2012). *Doing Q methodological research. Theory, method and interpretation*, 2012.

Wu, X., & Forbes, K. (2022). Multilingual identity in schools: A Q methodological study with Chinese LOTE-as-L3 learners in international and public high school contexts. *Journal of Language, Identity & Education*, 1-17.

Yashima, T. (2002). Willingness to communicate in a second language: The Japanese EFL context. *The Modern Language Journal*, *86*(1), 54-66.

Zhang, F., Wang, J., & Mairin H.-L. (2022). Research on language learning motivation in school settings in *System*. *System*, 107, 102817. https://doi.org/10.1016/j.system.2022.102817

Zheng, Y., Lu, X., & Ren, W. (2019). Profiling Chinese university students' motivation to learn multiple languages. *Journal of Multilingual and Multicultural Development*, *40*(7), 590-604.

Zheng, Y., Lu, X., & Ren, W. (2020). Tracking the evolution of Chinese learners' multilingual motivation through a longitudinal Q methodology. *The Modern Language Journal*, *104*(4), 781-803.

Appendix

List of statements.

All statements start with "I can see myself…", and were modified depending on the language learnt by the students.

1 ...working in [country].

2 ... living in [country].

3 ... travelling to [country] for tourism.

4 ... getting a job more easily thanks to my knowledge of [language].

5 ... pursuing an international career.

6 ... working in a job that requires me to speak [language].

7 ... taking more [language] classes in the future at school.

8 ... studying [language] at university.

9 ... studying in [country].

10 ... studying [language] for many years.

11 ... teaching [language].

12 ... translating to/from [language].

13 ... speaking [language] in everyday life.

14 ... speaking [language] fluently.

15 ... speaking [language] better than many other Australians.

16 ... working hard to improve my [language].

17 ... learning another foreign language more easily.

18 ... enjoying [country adj] popular culture such as music, films, TV etc.

19 ... reading magazines, books or websites in [language].

20 ... using Social Networks in [language].

21 ... proud to show that I speak [language].

22 ... with close friendships with [country adj] people.

23 ... able to integrate well in the [country adj] community in Perth.

24 ... speaking [language] with my [country adj] friends.

25 ... enjoying recreational activities with [country adj] people.

26 ... fostering understanding between Australia and [country].

27 ... satisfied with my knowledge of the [language] language and culture.

28 ... organising events related to [country adj] culture.

29 ... able to better understand people from any other culture.

30 ... with a better developed social network of friends.

31 ... taking the Year 12 university entrance exam in [language], if available.

32 ... my parents proud of my [language] language skills.

33 ... my teacher proud of my [language] language skills.

34 ... my parents asking me to study [language] in the future.

35 ... my teacher suggesting me to study [language] in the future.

36 ... studying [language] and getting good marks.

37 ... studying [language] harder than other subjects.

38 ... people around me saying that my [language] is good.

39 ... becoming a role model for other [language] language students.

40 ... with a big interest in all things [country adj].

41 ... studying [language] to be with my friends.

42 ... continuing to enjoy [language] class.

43 ... as a more knowledgeable person.

44 ... confidently speaking [language].

45 ... continuing to study [language] because I like my teacher.

46 ... studying [language] for the challenge.

47 ... studying [language] because it's cool.

Chapter 3

Understanding self-regulated language learning in the context of Japanese university students' self-study

Akiko Fukuda

Introduction

The importance of learner autonomy in second language (L2) learning has long been noted; particularly, in an English as a foreign language (EFL) environment, learners have limited time to learn an L2 because they are exposed to it primarily in the classroom. Thus, self-regulated learning (SRL) has attracted attention as a way of empowering language learners to engage in independent L2 learning activities, both inside and outside the classroom.

SRL is a cyclical process that requires forethought, performance/volitional control, and self-reflection (Zimmerman, 2000) to sustain and activate cognition, motivation, behaviour, and affects towards goal attainment (Schunk & Greene, 2018). SRL has motivational and cognitive components, and this overarching concept has allowed second language acquisition research to take a holistic perspective on the psychological characteristics of language learners (Dörnyei et al., 2015; Mercer et al., 2012).

SRL is prominent in language classrooms and has a significant relationship with L2 classroom activities (e.g., Nitta & Baba, 2015). However, few studies have addressed the reality of SRL outside the classroom setting. SRL is a highly contextual, situated process that results in unique characteristics for different learning situations. Thus, unlike classroom learning, out-of-class L2 learning does not passively rely on external factors such as teacher support, credits, and grades to facilitate SRL. In this case, students are expected to discipline themselves in such environments and develop specific SRL. Therefore, this study operationally applied Fukuda's (2022) definition of self-study as "individual language learning independent of classroom-related compulsions such as homework, assignments, grades/credits, and teachers" (p. 2). This definition signifies that students choose and control what they learn spontaneously and independently according to their objectives rather than performing an activity or task assigned in class.

To gain comprehensive understanding of language learners within this under-researched L2 self-study setting, I applied the Q methodology to investigate their individual

and shared perspectives. One of the Q methodology's strengths is its abductive reasoning (Watts & Stenner, 2012). SRL in self-study settings is a not-well-known field; thus, it requires attentive exploration (Schunk & Greene, 2018). By considering subjectivity, Q methodology enables us to elaborate on how learners perceive a particular situation and themselves, potentially suggesting a hypothesis about uniquely situated SRL and revealing how SRL and self-study are perceived by individual language learners. By comparing EFL learners' SRL attitudes before and after their English self-study period, I aim to uncover novel insights into their comprehensive understanding of language learners.

Literature review

SRL and L2 learning

Recent research on second language acquisition has recognised SRL as a key skill in autonomous language improvement (Dörnyei & Ryan, 2015). Studies have found that SRL capacity is positively related to L2 learning and proficiency (e.g., Csizér & Tankó, 2017; Fukuda, 2018; Oxford, 2017; Seker, 2016; Teng & Zhang, 2016; Wang et al., 2013) and classroom L2 performance (e.g., Hassanzadeh & Ranjbar, 2022; Lu et al., 2017; Teng, 2022). SRL involves goal-driven interactions between self-motivational beliefs, such as self-efficacy, intrinsic value, and goal orientation, and learning strategies, such as metacognitive strategies, help-seeking, and effort regulation (Pintrich et al., 1993). In these interactions, self-motivational beliefs are prerequisites for the use of self-regulatory strategies (Zimmerman & Schunk, 2008), which have rapidly expanded language learning strategy research to include both cognitive and motivational aspects (Dörnyei & Ryan, 2015; Thomas & Rose, 2019).

SRL is a complex and dynamic process that changes over time. Nitta and Baba (2015) investigated changes in the relationship between SRL and the ideal L2 self through a writing exercise over one year. They found that self-regulatory processes facilitated the evolution of learners' ideal L2 selves and their engagement with L2 writing. Using mixed-effects modelling, Sasaki et al. (2018) examined quantitative trends in writing self-regulatory strategies over three and a half years. They clarified that the development of self-regulation was influenced by cognitive and environmental factors and that learners' motivational fluctuations may have been related to self-regulation processes. Considering findings from prior studies, it is evident that can change over time and has an important relationship with motivational factors inside the classroom, which are consequently influenced by social interactions.

L2 self-study outside classrooms

Although considerable research has investigated L2 classroom settings, less attention has been paid to L2 learning outside the classroom. In EFL settings, L2 learners often require active exposure to and opportunities for using English beyond school settings to develop proficiency. This need arises because English classes are mandatory in many EFL settings; however, the time dedicated to English use within the classroom is insufficient to improve proficiency (Hiromori, 2023). Self-study is sometimes necessary for learners to become proficient in English, as it allows them to address uncertainties and questions and encourage learning autonomously. However, limited insight has been gained into SRL attitudes in EFL self-study situations, which are key factors in learners' continuous English acquisition .

Most studies conducted in self-study situations have examined SRL in the context of homework self-study (Kominato, 2016) or preparing for tests outside class (Sebesta & Speth, 2017). Kominato (2016) examined the effect of homework on students' SRL and self-efficacy at the college level and observed that students who completed regular homework assignments significantly improved their SRL. Sebesta and Speth (2017) focused on the preparation for biology examinations and discovered that high-achieving students tended to use SRL strategies more frequently than low-achieving students. These studies suggest that SRL plays an important role in learning outside the classroom. However, class-related assignments and activities directly related to grades differ from self-study, as defined in the Introduction. To my knowledge, no studies have addressed how learners engage in SRL or how their strategies change in self-study settings with little or no external pressure. Given the contextual nature of SRL, L2 learners' motivational beliefs and use of learning strategies are likely to differ from those of in-class L2 learning. This is because learners behave differently depending on the learning object, situation, and timeframe. Therefore, it is necessary to clarify SRL characteristics that EFL learners typically experience in self-study through. This requires a thorough comparison of their before and after engaging in autonomous learning.

Q methodology for holistic views of language learners

The current trend in the psychology of language learning has shifted towards a holistic understanding of learning behaviours and individuals (Mercer et al., 2012) based on multiple ways of collecting time-series, layered, and cross-sectional data. Psychological factors related to language learners are influenced by various internal and external elements, including the learning environment, materials, human relationships, resources, and culture (Larsen-Freeman & Cameron, 2008). Q methodology is congruent with this integrated approach as it

concentrates on understanding learners' salient and concrete patterns by investigating their common behaviours and perspectives (Watts & Stenner, 2005).

Q methodology is useful for observing L2 learners' SRL attitudes and perspectives. Nevertheless, to my knowledge, only Pemberton and Cooker (2012) attempted to address the close concept of SRL (i.e. self-directed learning) using Q methodology. They focused on out-of-class language learning without direct support from instructors, as in the present study. Moreover, they explored learners' perceptions of various first languages and L2s. Utilising the Q methodology, they identified six factors that were representative of the viewpoints of 29 of 30 participants. Their study evaluated self-directed learning at a single time point rather than investigated how it changed over time.

Q methodology can be applied to examine changes in language learners' psychological variations by asking participants to conduct sorts at different points in time. However, only a limited number of such studies have been conducted thus far (Irie & Ryan, 2015; Morea, 2022; Morea, in this volume; Zheng et al., 2020). Irie and Ryan (2015) attempted to capture the dynamics of motivational change by comparing Japanese university students before and after studying abroad. They found that the participants had a common view of L2 learning before going abroad but adopted three different types of perspectives on L2 selves after returning, underscoring the impact of overseas studies on EFL learners' dynamic motivation. Despite the potential benefits of using the Q methodology to investigate the contextually, situationally dependent, and dynamic nature of SRL among L2 learners, few studies have employed this methodology. Given the Q methodology's ability to uncover subtle features and fluctuations in learners' perceptions, it offers a promising avenue for exploring changes in SRL over time.

Thus, this study seeks to contribute to the theoretical and practical knowledge of SRL in the context of EFL self-study using the Q-methodological perspective. First, SRL is a process in which motivational and cognitive aspects are interrelated dynamically. Thus, adopting the Q methodology can help understand both common tendencies and uniqueness of EFL learners' psychological subtleties and may serve as a benchmark in approaching SRL mechanisms. Second, because EFL learners are less exposed to English in their daily lives, it is assumed that autonomous and self-regulated self-study potentially impacts their L2 competence in EFL environments. Identifying how SRL is accomplished in such contexts would benefit research on L2 self-study in Japan and the knowledge of instructing self-study in educational settings. Third, considering the contextual and malleable characteristics of SRL, EFL learners' SRL should exist in a certain state based on past L2 learning experiences, and some changes may occur due to influences from self-study and its associated experiences.

Therefore, the present study aims to identify L2 learners' perceptions of SRL in the context of L2 self-study and to observe changes in their perceptions using the Q methodology. To this end, the following research questions were formulated.

RQ1. What are the characteristics, commonalities, and differences in SRL among Japanese EFL learners at the beginning of their English self-study period?

RQ2. What are the characteristics, commonalities, and differences in SRL among Japanese EFL learners at the completion of their English self-study period?

RQ3. Are there any changes in learners' self-regulated L2 learning before and after the self-study period?

Methods

Participants

Ten Japanese university students participated in the study, nine (six females and three males) of whom completed the entire research process. Eight were first-year undergraduate students, and one was a third-year undergraduate student. Table 1 provides demographic information, including anonymised names (alphabets), majors, years of learning English, study-abroad experience, and *juku* (i.e. a type of cram school for university examinations in Japan). Their Test of English for International Communication (TOEIC) scores were reported at the beginning of this study.[9]

Table 1. Summary of the participants' basic information.

Student	Gender	Age	Major	ABEL	Study abroad	*Juku*	TOEIC
A	F	19	German	6	2 weeks	Yes	580
B	M	21	Business	6	-	Yes	700
C	F	19	Intercultural communication	12	-	No	400
D	F	19	German	12	10 months	Yes	500
E	F	19	Sociology	12	-	Yes	600

[9] Possible TOEIC scores are 445 for reading and 445 for listening; hence, 990 would be a perfect score. In Japan, many universities use TOEIC scores to measure students' English proficiency.

F	F	18	Christian studies	12	-	Yes	490
G	F	20	English	7	-	Yes	750
H	M	18	Intercultural communication	12	3 weeks	Yes	805
I	M	19	Education	10	-	Yes	495

Note. ABEL = age at the beginning of English learning

Concourse and Q sample

Q statements were generated following Fukuda (2022), who identified SRL constructs in an L2 self-study setting. I developed a Q sample based on the work of Pintrich et al. (1991, 1993) and identified three motivational factors (self-efficacy, learner values, and test anxiety) and four learning strategies (metacognitive, problem solving, learning maintenance, and learning effort). In the present study, these statements (48 in total; 20 motivational and 28 strategic) were adopted to ensure the representativeness of the theoretical coverage of L2 SRL (Watts & Stenner, 2012). These statements were printed on individual cards in Japanese, and motivational and strategic items were treated integrally as a single Q sample.

Although 4 out of the 48 statements were inverted items, which were originally shunned from the Q sort (Watts & Stenner, 2012), this study included them to cover the items and theoretical framework of Pintrich et al. (1991, 1993). During the interpretation phase, the inverted codes were discussed as having opposing meanings.

Procedure and analysis

After obtaining permission from teachers to recruit participants, I visited their English language classes for presentations, reading-and-writing, and e-learning. Interested learners submitted their email addresses and sent details about the study, personal data handling, and individual rights. Participation in this study was voluntary. Moreover, the participants were asked to engage in L2 self-study and undergo biweekly interviews for a semester. This process took approximately seven months; the exact duration varied according to their availability, ranging from six and a half to nine months of self-study. The interviews were conducted according to the participants' schedules as these interviews were intended to trace the participants' SRL development. Thus, they were asked to set goals and reflect on their past performance. Q sorts were conducted twice, at the beginning and end of this period. After obtaining informed consent, I explained the use of the Q methodology. Each Q session, consisting of a Q-sort activity and an interview, lasted one hour and was conducted individually. The pre-self-study

Q sessions were conducted from September to November 2018; the post-self-study Q sessions were conducted approximately seven to nine months after the initial interview, from April to July 2019.

Only one student left without providing a reason, whereas the remaining nine continued with the seven-month self-study and participated in two Q sessions. During the self-study period, they used online English learning materials provided by their university, featuring reading, listening, grammar, and vocabulary for English certification exams and general English learning. The participants could also choose or combine any other materials (e.g. textbooks and reference books). SRL originally allows students to determine all the considerations about self-study, such as what and how to learn for acquiring L2. However, in this study, the self-study material was provided freely available to all participants so that comparison of learning attitudes among them could be made. One possible reason for their sustained participation was the encouragement of the participants to chat freely with a graduate student (i.e. the researcher), regardless of their self-study progress. Another potential factor could have been the reward; however, its details were not disclosed until the end, and this is unlikely to have been a significant motivator.

The instructional condition given to the students was, 'When you study English by yourself, how do you think and act?' Each participant divided the cards with the Q statements into three categories (true, not true, and neither) and then placed each card following a given range using a distribution grid, with a value of +5 representing 'most like me' and –5 representing 'least like me'. The distribution grid was designated as follows: two cards for +/–5, three for +/–4, four for +/–3, five for +/–2, six for +/–1, and eight for 0. The participants were allowed to freely change the card arrangements until they were content with the final card placement. After card sorting, the researcher conducted semi-structured interviews to elicit learners' thoughts and feelings about their choices (see Yuan, this volume, for more information on integrating Q methodology data with interviews). All Q sorts and interviews were conducted in the participants' first language, Japanese, to ensure that their answers were based on accurate understanding.

I analysed the data using a dedicated software—PQ Method 2.35 (Schmolck & Atkinson, 2014)—and conducted a 'by-person' factor analysis considering participants as variables. Centroid factor analysis failed to identify the participants' uniqueness due to the presence of more confounding variables despite their interesting learning behaviours from the SRL perspective. As a result, I opted for principal component analysis with Varimax rotation for the pre- and post-self-study Q sessions to integrate their perspectives better. I prepared

verbatim transcripts of the data obtained from the semi-structured interviews and repeatedly read to confirm their relevance to Q-sorting activities. The interview extracts presented in the results were translated into English, and all were proofread by native speakers.

Results

Pre-self-study Q session: Prior to Starting the L2 Self-Study Period

The first research question aimed to identify Japanese EFL learners' SRL characteristics before they began English self-study. Based on an eigenvalue above 1.00, a two-factor solution was judged as the most appropriate for interpretability. Two out of the nine participants were confounded by Pre-Factors 1 and 2 and were therefore excluded from interpreting the respective factors. These two factors accounted for 57% of the total cumulative variance. The factor arrays for these two factors are presented in Table 2.

Table 2. Extracted factor arrays in the pre- and post-self-study sessions.

		Pre-self-study		Post-self-study			
No.	Statements (Motivation)	F1	F2	F1	F2	F3	F4
1	I am certain that I can do well with difficult English materials.	–3	–2	+1	0	–3	0
2	I am confident that I can understand difficult questions or content when I am learning English.	0	–3	+3	0	–1	–1
3	I am confident that I understand the basic concepts of English.	0	–4	+2	–1	0	+2
4	I expect to do well in English learning.	–3	–2	–1	–3	–4	+1
5	I prefer English material that arouses my curiosity, even if it is unrelated to the grade or score.	0	0	0	–2	+2	+1
6	Studying English allows me to apply the content to other things.	–2	+4	0	–3	+1	+1
7	Getting a good grade or score on the test is the most satisfying for me.	–4	–3	–5	+2	–3	+4

8	I want to study English by myself because I get better scores or grades than most of the other students.	–2	+1	–3	0	–4	+4
9	I am certain that I can master English skills.	+2	+2	+2	+2	–2	+4
10	It is essential for me to acquire English skills.	+3	+5	+2	+1	+3	+3
11	Understanding English is important to me.	+3	+4	+4	+1	+3	+2
12	I think that English learning will be useful in the future.	+5	+5	+5	+2	+4	+5
13	If I try hard enough, then I will master English skills for sure.	+5	+3	+1	+5	+3	+3
14	If I do not improve my English ability enough, it is because I did not try hard enough.	+4	+3	+2	+2	+5	+3
15	I am very interested in English.	+2	+4	+2	+1	+4	+5
16	If I study English in appropriate ways, then I will be able to master it.	+3	+2	+3	–1	+2	+2
17	It is my own fault if I do not learn English.	+4	+2	+3	0	+4	+2
18	When I think of tests, I realise how poorly I am doing compared with other students.	+2	–3	+1	+4	–3	–4
19	Before and during a test, I tend to think of the consequences of failing.	+1	–5	+1	+1	–3	–3
20	When I think of tests, I have an uneasy and upset feeling.	+1	–4	+1	–1	–2	–1
	Statements (Learning strategies)						
21	When I study English, I often speculate about my own ideas related to what I am learning.	–2	0	0	1	–3	–2
22	I treat the English material as a starting point and try to develop my own ideas about it.	+1	0	0	–3	0	0

23	When studying English, I try to think through a topic and decide what I am supposed to learn from it rather than just reading it over.	–4	+1	0	–1	0	–1
24	When I study English, I try to relate the content to what I already know.	+2	+1	+3	–2	0	+1
25	Regarding what I read or hear while learning English, I often consider whether I find it convincing.	0	+1	–2	–2	–1	–3
26	Whenever I read or hear an assertion or conclusion in English, I think about possible alternatives.	–5	0	–2	–3	–4	–2
27	When I learn English, I pull together information from different resources.	–1	–2	–3	+1	0	–1
28	When reading English articles, I make up questions to help focus my reading.	0	–1	–4	0	–2	–2
29	Before I study new English course material thoroughly, I often skim it to see how it is organised.	–1	–1	–1	–2	+1	–3
30	I ask others who are good at English to clarify concepts I do not understand well.	+3	0	–2	+3	–1	–1
31	When I become confused about English readings, I go back and try to figure them out.	+2	+3	+1	+3	+2	0
32	I work hard to do well in English learning even if I do not like what I am doing.	0	–1	–3	+3	0	+1
33	When studying English, I go through the materials I used before and try to find the most important ideas.	+1	0	0	–1	+1	0
34	When I learn English, I try to determine which part of the content I do not understand well.	0	+1	+3	0	+2	0
35	When learning English, I read the English materials over and over again.	0	–2	+4	0	0	0
36	If I get confused while taking notes when learning English, I make sure I sort it out afterwards.	–3	–3	–1	0	–1	–5

37	When I cannot understand English well, I ask other people for help or search the Web.	+4	+2	+5	+2	+2	+1
38	I go over the materials I used before and make an outline of important concepts while studying English.	–2	–1	–4	–4	+1	–4
39	When reading English, I write brief summaries of the main ideas and important words.	–1	+1	0	–1	–1	0
40	I make simple charts, diagrams, or tables while learning English.	–5	–1	–5	–5	–1	–5
41	When I read English, I write some memos to help me organise my thoughts.	+1	+2	–3	–4	+1	0
42	Even when learning English is dull and uninteresting, I manage to keep working until the end.	–1	–4	0	–2	–2	–2
43	I often feel so lazy or bored when I study English that I quit before I finish what I planned to do (rev).	–2	0	–2	+4	+1	+2
44	While learning English, I often miss important points because I am thinking of other things (rev).	+1	0	–5	+4	+2	–1
45	I make sure I keep up with what I plan to do when learning English.	–4	–2	–1	–5	–5	–3
46	I find it hard to stick to a study schedule (rev).	–1	+3	–1	+3	+4	+3
47	I begin to learn English as scheduled.	–3	–5	–1	–4	–5	–4
48	I often find that I have been reading English outside the class but do not know what it is at all (rev).	–1	–1	–2	+5	–1	–2

Note. rev = reversed item.

Based on a crib sheet (Watts & Stenner, 2012), summarising the salient perceptions of the learners contained within a group, Pre-Factor 1 was named ‘value- and responsibility-centric learners’, accounted for 29% of the study variance and consisted of four significant

loadings. The learners in this group highly valued learning English (12, +5)[10] and were confident about mastering the language (13, +5). They believed that they could reach a high level of English proficiency (13, +3) by studying appropriately, which seemed to be supported by their sense of responsibility. If their English proficiency was lacking, they tended to attribute it to their own fault or a lack of effort (14, +4; 17, +4). Compared with the other group, they displayed an intrinsic goal orientation; thus, obtaining better test scores was not a priority (7, –4; 8, –2). Regarding strategies, Pre-Factor 1 learners were likely to seek help when they encountered difficulties in learning English, such as searching the Internet (37, +4), asking others who were better at English (30, +3), and repeatedly referring to learning materials (33, +1). Compared to the Pre-Factor 2 learners, they were more likely to set schedules for studying English (46, –1; 47, –3) and keep learning even if they found it dull (42, –1; 43, 0). The ranked –5 statements indicated that they were not good at employing cognitive strategies such as generating alternative ideas (26, –5) or preparing charts/graphs to arrange the content (40, –5). For example, as the following excerpt shows, Student A rarely considered alternative ideas when reading English materials.

> When I read English materials, I just think '*I see'*. The English content in the texts usually convinces me about this. This may be because … I recognise it as prepared information only for textbooks.

Pre-Factor 2 was named 'value- and low-anxiety-centric learners'. This factor included a significant loading of three participants and accounted for 28% of the study variance. Pre-Factor 2 learners also recognised the importance of learning English because it is useful and essential for the future (10, +5; 12, +5) and applicable to other subjects (6, +4). Therefore, they were interested in English (15, +4). Simultaneously, they valued good test grades (8, +1). However, compared to the Pre-Factor 1 learners, their confidence in learning English was low (2, –3; 3, –4), and they did not expect to do particularly well (1, –2; 4, –2). When it came to taking tests, the Pre-Factor 2 learners did not consider the consequences of failing before/during the tests (19, –5), and they did not recognise their poor performance compared to other students (18, –3) or feel upset (20, –4). Student G made the following comment:

> Whatever happens, I think I will get a good score because I have prepared sufficiently,

[10] The number of the statement and the rank assigned to the factor are indicated.

so I don't think about a bad result. I'm not worried about whether I will fail, but I think I can pass and I will try.

Regarding strategies, they reported difficulty in learning English according to a schedule (47, –5; 46, +3), readily abandoning other plans to learn English (45, –2), and sometimes feeling lazy or bored (43, 0). Pre-Factor 2 learners tended to use organisation and summary as SRL strategies (41, +2; 39, +1). Compared to Pre-Factor 1 learners, Pre-Factor 2 learners used fewer help-seeking strategies, such as searching the Internet and asking others (37, +2; 30, 0).

Post-self-study Q session: After finishing the L2 self-study period

Initially, the inverted factor analysis of the post-self-study Q session suggested a two-factor solution based on an eigenvalue greater than 1.00; however, further analysis of the interview data led to a four-factor solution, which could allow for a more nuanced understanding of SRL and provide maximum interpretability. Despite factors 3 and 4 having eigenvalues below 1.00 (0.91 and 0.80, respectively), this solution was deemed more appropriate for the available data. Interpretations were made using the factor arrays in Table 2 to identify distinguishing statements, except for one learner, who confounded Factors 2 and 4 and required a separate discussion.

Post-Factor 1 involved two participants, accounting for 19% of the total variance. This factor was named 'mastery-oriented learners' because of their remarkable perspectives on acquiring English through self-study. After the self-study period, they still recognised the importance and usefulness of English in society (11, +4; 10, +2; 12, +5). However, they also experienced strong self-efficacy (1, +1; 2, +3; 9, +2), focusing on becoming proficient in the language rather than obtaining better results than others (7, –5; 8, –3). Another unique trait was that these learners made enormous efforts to avoid missing important points because of a lack of concentration (44, –5), maintained a high concentration (48, –2), overcame boredom (43, –2), and worked according to a schedule (45, –1; 47, –1). These behaviours indicate that mastery was the top priority for this type of learner, as confirmed by their active use of help-seeking and problem-solving strategies (34, +3; 35, +4; 37, +5).

The Post-Factor 2 group, named 'stress-affected learners', also had two participants and explained 22% of the study variance. These learners believed that they would master English if they tried hard enough (13, +5); however, their other beliefs and values ranked lowest among the four groups (10, +1; 11, +1; 15, +1; 16, –1). Particularly, their interest in the English

language was low (15, +1), and they found learning English stressful, leading to less confidence (3, –1) and only placed a slight emphasis on obtaining good grades (5, –2). They saw little value in learning English; instead, they considered it as something they had to work hard at and even deserved to learn it at times (32, +3). Student C explained this attitude towards English.

> I expect that people will not have to use English because AI [artificial intelligence] is developing and will replace us. To be honest, the translation function is great. I can communicate with others using only this function.… I think learning English is useless. … Even if I try hard to learn English, I'm worried that it will be meaningless.

Stress-affected learners had difficulty concentrating and sometimes missed information while reading (48, +5). They also had difficulty focusing because they thought about other things while learning (44, +4). Overall, they were passive and rarely planned or felt motivated about English self-study, tending to quit if they became bored (42, –2; 43, +4; 45, –5; 46, +3; 47, –4). This may have been due to their perception of 'English as an obligation'.

Post-Factor 3 was named 'cost-driven' learners; it explained 20% of the total variance and comprised two learners. They strongly believed that they would not acquire good English skills unless they tried hard, and this would be their own fault (14, +5; 17, +4). They emphasised the substantial value of learning English (12, +4; 15, +4) but simultaneously had weak self-efficacy (1, –3; 4, –4; 5, +2; 9, –2). Similar to stress-affected learners, cost-driven learners had difficulty managing their schedules (45, –5; 46, +4; 47, –5). Unlike stress-affected learners, they found English inspiring (5, +2; 6, +1) but worked on English self-study only when motivated to do so, as shown by the excerpt from Student F:

> I'm bad at making plans. I plan a schedule, but it never works (laughs). I hate doing what I plan as scheduled. I know I must do it right now, but I cannot help but hang out with my friends. I know I have to learn English to obtain good scores on the TOEIC test, but I don't do anything about it (laughs).

Regarding learning strategies, they preferred to learn English in a text-centred way by looking back at texts (33, +1), taking notes (41, +1), and making charts and graphs (40, –1), compared to learners in the other factors.

Finally, Post-Factor 4 learners were obsessed with taking exams; thus, they were called 'exam-oriented learners'. They placed substantial value on learning English (12, +5) and had

a keen interest in the language itself (15, +5). Concurrently, their confidence and expectations rested on their sense of self-efficacy gained from obtaining good exam scores (7, +4) rather than becoming proficient in English (11, +2). They liked being superior to others in their English performance (8, +4), as Student H explained:

> I enjoy getting better scores than others (laughs). This becomes my goal in studying English because the test motivates me. … It's easy for me to study English to obtain better scores … because the ranking is visible, which means that I can see who ranks higher and who ranks lower.

Exam-oriented learners experienced low anxiety levels about taking tests (18, –4), suggesting that they were highly confident about test outcomes and believed that they would obtain better scores than others. Regarding exam orientation, their tendency not to organise their notes (36, –5; 40, –5) or use problem-solving strategies (30, –1; 37, +1) indicated a preference for drill-type practice.

4.3. Changes in SRL perceptions through L2 self-study

The pre-self-study Q session yielded two factors; however, the post-self-study Q session conducted more than seven months later generated four. Figure 1 illustrates that Pre-Factors 1 and 2 learners developed two different characteristics after their L2 self-study. The confounding variables, Students F and I, demonstrated different outcomes in the post-self-study Q session. Student F emerged in Post-Factor 3, whereas Student I consistently acted as a confounding variable throughout the study, loading on Factors 2 and 4.

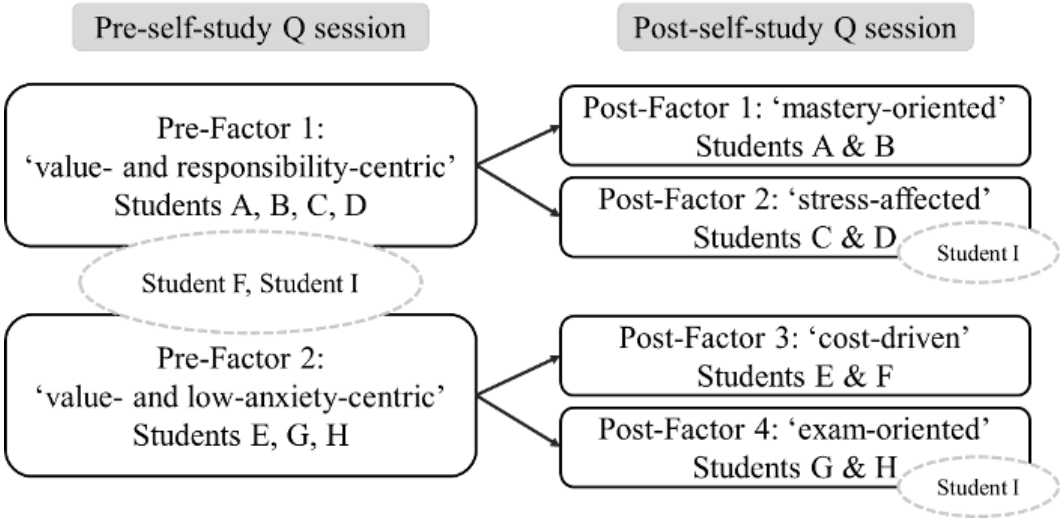

Figure 1. Summary of changes in SRL perceptions through L2 self-study.

Table 3 presents the characteristics of each type of SRL perception. Value- and responsibility-centric learners potentially perceived the value of learning English, felt extremely anxious about tests, utilised resources to solve English problems, and made efforts to maintain their learning schedules. After the L2 self-study, they were subdivided into mastery-oriented and stress-affected learners. Mastery-oriented learners maintained their original tendencies but increased their self-efficacy, expanded their problem-solving strategies, and tried to monitor their understanding of the content. In contrast, stress-affected learners did not particularly value English learning and realised that they did not effectively use problem-solving and learning effort strategies. Consequently, they experienced high levels of anxiety regarding English tests and learning.

Value- and low-anxiety-centric learners had unique perspectives on the value of English. After L2 self-study, they were characterised as cost-driven and exam-oriented learners. Cost-driven learners still recognised the importance of learning English but faced difficulty in deliberately learning the language. They preferred text-based learning, resulting in a perceived preference for solving problems solely using their own resources. Exam-oriented learners experienced self-efficacy when they outperformed others on tests while also recognising the value of learning English. Furthermore, they were aware that L2 self-study improved their effort regulation strategies, such as checking their understanding of what they had learned.

Table 3. Overview of perspectives on L2 self-study according to SRL sub-elements.

	Self-Efficacy		Learner Values	Test Anxiety	Metacog. Strategies	Problem-Solving		Learning Management	Learning Effort	
	U	T				Ext	Int		Skd	Cont
Pre-self-study Q session										
Value- & responsibility-centric			✓	✓		✓			✓	
Value- & low-anxiety-centric			✓					✓		
Post-self-study										

Q session												
Mastery-oriented	✓		✓	✓			✓	✓			✓	✓
Stress-affected				✓								
Cost-driven			✓					✓	✓			
Exam-oriented		✓	✓									✓

Note: ✓ = had the characteristics, blank = did not have the characteristics. U = self-efficacy for understanding English, T = self-efficacy for getting good scores on the tests, Ext = problem-solving by using external resources, Int = problem-solving by using internal resources, Skd = learning effort strategies to keep on schedule, Cont = learning effort strategies to metacognitively understand the content.

Discussion and conclusion

The Q methodology revealed changing perceptions of SRL among EFL learners who showed diverse characteristics but shared commonalities. In the pre-self-study Q session, two factors were observed that reflected SRL in L2 self-study, with a high ranking for the usefulness of English (Statement 12), indicating the learners' recognition of its value. This perception may have been shaped by their prior experiences, as most learners were first-year students who had studied hard at juku to prepare for university entrance exams, considering English to be one of the most crucial subjects for their future. However, their anxiety level about taking exams and their learning strategies varied based on how they studied English outside class hours and in juku, leading to different perspectives on English self-study among the two groups of learners.

The values of learning English diminished for stress-affected learners. However, others maintained their interest in English in the post-self-study Q session. This tendency indicates that Japanese students perceive a high demand for English, such as studying abroad or career advancement. Intrinsic value (or task value) predicts SRL strategy use (Bai & Wang, 2023; Durik et al., 2006), explaining why mastery- and exam-oriented learners reported using more effort regulation strategies after L2 self-study, which they were unaware of before L2 self-study. In contrast, cost-driven learners did not believe that they would do well despite perceiving English as valuable. This may have been because they viewed English self-study as a cost. Referring to expectancy–value theory (Eccles, 2005), if they felt that the effort required to learn English was not commensurate with the amount of work, that learning English was at the expense of other activities, or were insecure or afraid of not improving their English, then they were likely to decide that learning English was not worth the effort and disengage from

learning. Therefore, this result suggests that learners' perceptions of cost as an additional factor determining their SRL behaviour need to be examined in more detail.

Another notable characteristic is self-efficacy. Only mastery- and exam-oriented learners showed increased self-efficacy through self-study as well as the use of strategies such as planning their studies and recognising and improving their deficiencies. Self-efficacy is a core motivator of SRL and leads to the use of SRL strategies and a high level of L2 performance (Mills, 2014). The sources of self-efficacy proposed by Bandura (1997), particularly mastery experience, were found to influence the participants' SRL. Self-efficacy cannot be generated without doing some work, which, in turn, would result in no expertise or development of SRL. For learners to engage in such work in a self-study environment, they need to be guided by goals and objectives; hence, goal orientation is important.

The most distinctive feature of stress-affected and cost-driven learners is that external pressures and rewards are fundamental driving forces (i.e. objectives) of their English learning. Cost-driven learners had difficulty engaging in L2 self-study because of a lack of motivation regulation strategies. In contrast, stress-affected learners had notably low self-efficacy, which harmed SRL strategy use and increased their anxiety. Moreover, exam-oriented learners primarily focused on test outcomes, which only able to boost their self-efficacy during exams. When integrated with the value of English, it is possible that some learners' underlying experiences of learning English through extrinsic motivation may hinder their development of self-efficacy. These findings suggest that the immediacy and persistence of self-efficacy may vary in different learning situations. However, learners whose goals are approach-oriented or those with intrinsic values, such as mastery- and exam-oriented learners, may have a better chance of gaining self-efficacy and achieving SRL in a self-study environment.

Based on the pre- and post-self-study Q session results, learners' perceptions evolved from two factors before L2 self-study into four factors afterwards, suggesting that self-study prompted changes in their SRL attitudes. However, these findings must be interpreted carefully. During their self-study period, the learners led ordinary student lives without external demands that limited their usual activities, and self-study was left entirely to their agency. Thus, it was unlikely that the learners acquired new SRL abilities or attitudes; instead, it would make more sense that their latent (or yet developed) SRL surfaced as they progressed through the self-study process.

The self-study environment, in which learners were required to set their own objectives, likely caused this change. Mastery-oriented learners realised that they could continue with SRL as long as they perceived their own achievements and growth during their self-study. However,

stress-affected and cost-driven learners struggled to find suitable goals, leading to English learning as an obligation and procrastination despite acknowledging the value of English. Exam-oriented learners attained SRL by setting exam-related goals. It is essential to understand that the four identified factors reflect learners' covert attitudes and different development trajectories, rather than complete changes in motivation before and after studying abroad (Irie & Ryan, 2015). Inherent SRL attitudes were unique to each individual and became more pronounced and recognisable after self-study than at the outset.

Similar to mastery-oriented learners, self-regulated learners who maintain their self-efficacy and use problem-solving strategies may not need teacher support. However, some learners struggled with self-study due to waning interest, insufficient strategy use, and a singular focus on exams, highlighting the difficulties of independent English language learning. This approach demands careful planning, adherence to schedules, and effort regulation. Learners who prioritise other pursuits over English self-study may struggle with these challenges. Self-study did not require learners to achieve higher test scores or demonstrate completing a specific amount of learning material. The approach to self-study was entirely self-directed, giving learners the autonomy to determine what, when, and how to learn.

To support such self-study, teachers can assign tasks that help students recognise the value of learning their L2 and provide instruction on SRL strategies, such as planning, goal setting, time management, and motivational control. SRL is a teachable concept that teachers can scaffold (Wolters, 1998). In educational settings, students often focus only on completing given tasks without strategic planning. However, if learners value English learning, they can have clear goals and identify the steps necessary to achieve them through self-study. By teaching students a range of SRL strategies that they can select and employ, they can develop the skills necessary to learn their L2 independently after completing their education programs.

Overall, this study confirmed that the learners' high value and learning strategy preferences were largely due to social and cultural influences. Moreover, this study observed that SRL attitudes do not appear to be easily or naturally acquired. It was assumed that SRL toward L2 learning would change through self-study; however, this study's participants consistently demonstrated a certain perceived value of English. This may be attributed to the widespread use of English as a study tool for exams and the active use of juku at milestones in student lives. In Japan, the experience of taking high school and university entrance examinations plays a significant role in forming values towards English. To understand the background of the SRL process, future research should highlight the trajectories through which learners' motivational beliefs and SRL strategies are formed for each goal orientation. In

addition, learners' SRL patterns, including motivational beliefs and SRL strategies that were originally latent (i.e. not expressed beforehand), became apparent only after self-study opportunities. This highlights the importance of practical and explicit instruction so that students can objectively understand their own motivational beliefs, acquire new strategies, and achieve SRL both inside and outside the L2 classroom. Finally, pursuing a comprehensive understanding of SRL among L2 learners is essential. Thus, within the given contextual background, there is a need for future research utilising Q methodology and comparing across cultures and learning experiences to unveil the substantive and context-unique factors of SRL in self-study. This is expected to contribute to language teaching by incorporating the attainment of SRL inside and outside the classroom for learners with diverse attributes.

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References

Bai, B., & Wang, J. (2023). Conceptualizing self-regulated reading-to-write in ESL/EFL writing and investigating its relationships to motivation and writing competence. *Language Teaching Research*, *27*(5, 1193–1216). https://doi.org/10.1177/1362168820971740

Bandura, A. (1997). *Self-efficacy: The exercise of control.* Freeman.

Csizér, K., & Tankó, G. (2017). English majors' self-regulatory control strategy use in academic writing and its relation to L2 motivation. *Applied Linguistics, 38*(3), 386–404. https://doi.org/10.1093/applin/amv033

Dörnyei, Z., MacIntyre, P. D., & Henry, A. (2015). Introduction: Applying complex dynamic systems principles to empirical research on L2 motivation. In Z. Dörnyei, P. D. MacIntyre, & A. Henry (Eds.), *Motivational dynamics in language learning* (pp. 1–10). Multilingual Matters.

Dörnyei, Z., & Ryan, S. (2015). *The psychology of the language learner revisited.* Routledge.

Durik, A. M., Vida, M., & Eccles, J. S. (2006). Task values and ability beliefs as predictors of high school literacy choices: A developmental analysis. *Journal of Educational Psychology, 98*(2), 382–393. https://doi.org/10.1037/0022-0663.98.2.382

Eccles, J. S. (2005). Subjective task value and the Eccles et al. model of achievement-related choices. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 105–121). Guilford.

Fukuda, A. (2018). The Japanese EFL learners' self-regulated language learning and proficiency. *Journal of Pan-Pacific Association of Applied Linguistics, 22*(1), 65–87. https://doi.org/10.25256/PAAL.22.1.4

Fukuda, A. (2022). The development of a self-regulated second language learning questionnaire for an L2 self-study setting. *Journal for Psychology of language learning, 4*(2), 1–17. https://doi.org/10.52598/jpll/4/2/3

Hassanzadeh, M., & Ranjbar, M. (2022). A mixed methods approach to exploring grammar learning strategies in self-regulation task phases: Evidence from grounded theory and regression analysis. *Language Teaching Research, 0*(0), 1–25. https://doi.org/10.1177/13621688221090825

Hiromori, Y. (2023). *Eigogakushu no mekanizumu: Dainigengoshutokukenkyu ni motodzuku kokateki na benkyoho: Kaiteiban* [The mechanism of English learning: An effective way to learn based on the second language acquisition research: Revised edition]. Taishukanshoten.

Irie, K., & Ryan, S. (2015). Study abroad and the dynamics of change in learner L2 self-concept. In Z. Dörnyei, P. D. MacIntyre, & A. Henry (Eds.), *Motivational dynamics in language learning* (pp. 343–366). Multilingual Matters.

Kominato, A. (2016). The impact of homework on self-regulation and English self-efficacy among Japanese underprepared college students. *KATE Journal, 30*, 43–56. https://doi.org/10.20806/katejournal.30.0_43

Larsen-Freeman, D., & Cameron, L. (2008). *Complex systems and applied linguistics.* Oxford.

Lu, Y., Lo, W., & Lincoln, F. (2017). Effects of intervention on self-regulated learning for second language learners. *Chinese Journal of Applied Linguistics, 40*(3), https://doi.org/10.1515/cjal-2017-0014233–260

Mercer, S., Ryan, S., & Williams, M. (2012). *Psychology for language learning: Insights from research, theory and practice.* Palgrave Macmillan.

Mills, N. (2014). Self-efficacy in second language acquisition. In S. Mercer & M. Williams (Eds.), *Multiple perspectives on the self in SLA* (pp. 6–22). Multilingual Matters.

Morea, N. (2022). Investigating change in subjectivity: The analysis of Q-sorts in longitudinal research. *Research Methods in Applied Linguistics, 1,* 100025. https://doi.org/10.1016/j.rmal.2022.100025

Nitta, R., & Baba, K. (2015). Self-regulation in the evolution of the ideal L2 self: A complex dynamic systems approach to the L2 motivational self system. In Z. Dörnyei, P. D. Maclntyre, & A. Henry (Eds.). *Motivational dynamics in language learning* (pp. 367–396). Multilingual Matters.

Oxford, R. L. (2017). *Teaching and researching language learning strategies: Self-regulation in context* (2nd ed.). Routledge.

Pemberton, R., & Cooker, L. (2012). Self-directed learning: Concepts, practice, and a novel research methodology. In S. Mercer, S. Ryan, & M. Williams (Eds.), *Psychology for language learning: Insights from research, theory and practice* (pp. 203–219). Palgrave Macmillan.

Pintrich, P. R., Smith, D. A. F., Garcia, T., & McKeachie, W. J. (1991). A manual for the use of the motivated strategies for learning questionnaire (MSLQ). *National Center for Research to Improve Postsecondary Teaching and Learning. University of Michigan.*

Pintrich, P. R., Smith, D. A. F., Garcia, T., & McKeachie, W. J. (1993). Reliability and predictive validity of the motivated strategies for learning questionnaire (MSLQ). *Educational and Psychological Measurement, 53*(3), 801–813. https://doi.org/10.1177/0013164493053003024

Sasaki, M., Mizumoto, A., & Murakami, A. (2018). Developmental trajectories in L2 writing strategy use: A self-regulation perspective. *The Modern Language Journal, 102*(2), 292–309. https://doi.org/10.1111/modl.12469

Schmolck, P., & Atkinson, J. (2014). *PQ Method* (version 2.35). [Computer Software]. Retrieved from http://schmolck.userweb.mwn.de/qmethod

Schunk, D. H., & Greene, J. A. (2018). Historical, contemporary, and future perspectives on self-regulated learning and performance. In D. H. Schunk & J. A. Greene (Eds.), *Handbook of self-regulation of learning and performance* (2nd ed., pp. 1–15). Routledge.

Sebesta, A. J., & Speth, E. B. (2017). How should I study for the exam? Self-regulated learning strategies and achievement in introductory biology. *CBE—Life Sciences Education, 16:ar30*, 1–12. https://doi.org/10.1187/cbe.16-09-0269

Seker, M. (2016). The use of self-regulation strategies by foreign language learners and its role in language achievement. *Language Teaching Research, 20*(5), 600–608. https://doi.org/10.1177/1362168815578550

Teng, L. S. (2022). Explicit strategy-based instruction in L2 writing contexts: A perspective of self-regulated learning and formative assessment. *Assessing Writing, 53*, 100645.

https://doi.org/10.1016/j.asw.2022.100645

Teng, L. S., & Zhang, L. J. (2016). A questionnaire-based validation of multidimensional models of self-regulated learning strategies. *Modern Language Journal, 100*(3), 674–701. https://doi.org/10.1111/modl.12339

Thomas, N., & Rose, H. (2019). Do language learning strategies need to be self-directed? Disentangling strategies from self-regulated learning. *TESOL Quarterly, 53*(1), 248–257. https://doi.org/10.1002/tesq.473

Wang, C., Schwab, G., Fenn, P., & Chang, M. (2013). Self-efficacy and self-regulated learning strategies for English language learners: Comparison between Chinese and German college students. *Journal of Educational and Developmental Psychology, 3*(1), 173–191. https://doi.org/10.5539/jedp.v3n1p173

Watts, S., & Stenner, P. (2005). Doing Q methodology: Theory, method and interpretation. *Qualitative research in psychology, 2*(1), 67–91. https://doi.org/10.1191/1478088705qp022oa

Watts, S., & Stenner, P. (2012). *Doing Q methodological research: Theory, method & interpretation*. SAGE.

Wolters, C. A. (1998). Self-regulated learning and college students' regulation of motivation. *Journal of Educational Psychology, 90*(2), 224–235. https://doi.org/10.1037/0022-0663.90.2.224

Zheng, Y., Lu, X., & Ren, W. (2020). Tracking the evolution of Chinese learners' multilingual motivation through a longitudinal Q methodology. *The Modern Language Journal, 104*(4), 781–803. https://doi.org/10.1111/modl.12672

Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts., P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13–39). Academic Press.

Zimmerman, B. J., & Schunk, D. H. (2008). An essential dimension of self-regulated learning. In D. H. Schunk, & B. J. Zimmerman (Eds.), *Motivation and self-regulated learning: Theory, research, and applications*, (pp. 1–30). Routledge.

Chapter 4

Australian-Korean multicultural family members' emotions about their language use at home

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Introduction

The family is seen as the critical social domain in which to investigate ideologies, management, and practices concerning language(s) (Spolsky, 2012) and family members' planning for and attitudes towards the use of language(s) at home are known as family language policy (FLP) (King & Fogle, 2006). However, such planning does not need to be conscious and overt, as FLP rather lies "along a continuum ranging from highly planned and orchestrated, to the invisible, laissez-faire practices of most families" (Caldas, 2012, p. 352). Historically, the development of the field of FLP has been described as having four different phases, whereas the current phase needs an intentional inclusion of a "more diverse range of family types, languages, and contexts" (King, 2016, p. 727).

Even though FLP is often influenced by the same processes as language policies in any other context (Spolsky, 2012), the family environment is inherently different from a wider social reality due to its close connection to emotions. As outlined by Tannenbaum (2012), "experiences, hopes and worries […], close interactions, attraction, aversion, love, hate, dependency, alienation, closeness" (p. 58) are all part of daily family life. She continued by saying that despite "the centrality of emotional aspects within FLPs" (p. 57), emotions are largely under-researched. However, considering the key role they have in influencing decisions on language use at home (see e.g. Curdt-Christiansen, 2016; Sevinç, 2020; Tang & Calafato, 2022a/b), it is hardly surprising that this gap in the field of FLP has now started to be filled (Sevinç & Mirhavedi, 2022). The most recent scholarly production related to emotions and FLP has highlighted the context of migration, where family interactions are often multilingual, complex, and dynamic.

The present chapter primarily contributes to research in FLP, multilingualism, and emotions by investigating Australian-Korean family members' emotions about the language(s) used at home. Because different generations might have entirely different experiences, based

on their subjective understanding of bi- and multilingualism (Zhu & Li, 2016), the present study involved members of two generations in the same Q methodological data collection activity. With the application of a visual Q sample consisting of emojis, this study also contributes to a less conventional use of Q methodology and, to our knowledge, represents the first of this kind in language research (see the introduction in this volume).

Transnational family language policies and emotions

Transnationalism describes the "movement across cultural, linguistic, and (often) geopolitical or regional borders and boundaries" (Duff, 2015, p. 57). Transnational family structures are ubiquitous and understanding the experiences of transnational individuals with the languages in their lives is the initial step "to facilitate the adjustment processes of these growing numbers of families around the world" (Hirsch & Lee, 2018, p. 892). In addition, comprehending transnational multilingual family members' emotions toward language use can be essential for educational, social, commercial, and political reasons (Tang & Calafato, 2022a). Irrespective of the translocation of entire nuclear families or only one or more individuals, transnational families are most often multicultural and multilingual to some extent. Used as an umbrella term for both *immigrants* (seeking permanent residency) and *settlers* (likely to have plans for further moves), transnational families are constantly (re)negotiating issues related to language (Hirsch & Lee, 2018). This is illustrated by Song (2010), who studied Korean-American communities in the US. Immigrants and settlers might show different positions concerning their community, in relation to both Korea and the host country. As Hirsch and Lee (2018) discussed, transnationals intending to stay permanently might have normalised the use of English in their family, and Korean is being challenged as an identity marker. This is rather unexpected for transnational settlers, whose FLP attitudes are still rooted in their Korean society, and English is rather seen in terms of linguistic capital. It also demonstrates how the linguistic negotiations within a family consist not only of the choice of language for various purposes of communication but also of what language to learn and maintain as a cultural aspect. Furthermore, it accentuates how transnationalism and multilingualism are intimately tied to how individuals imagine themselves and are seen by others (Duff, 2015).

While individual multilingualism is generally celebrated due to potential cognitive and social benefits, many families can experience it as an emotional burden. The desire for multilingual parenting does not necessarily result in harmonious bi- and multilingualism (De Houwer, 2015, Piller & Gerber, 2021). The complex issue of engaging with linguistic choices in the family always involves family members' emotions. In fact, emotions are often "directly

related to parents' perceptions of and investment in their heritage language" (Curdt-Christiansen & Iwaniec 2022, p. 1). Most commonly, transnational and multilingual families have to deal with first-generation migrants' challenging undertaking of learning the languages of their new host country and their local-born children's heritage language maintenance (Zhu & Li, 2016). As a result, transnational families, particularly those who take explicit family language planning actions, occasionally decide to deliberately give up multilingualism to reduce their negative emotions (De Houwer, 2020). This is unfortunate, as it affects children's bilingual development in a potentially multilingual family.

Considering the difficulties in managing language(s) in the family, it is not surprising that the field of FLP is dominated by studies on negative emotions, such as shame, guilt, and anxiety (see e.g. Tannenbaum, 2012; Curdt-Christiansen, 2016; Sevinç, 2020, 2022), and compared to the considerable literature on several different emotions in the language classroom (see e.g. Dewaele & Pavelescu, 2021; Fraschini, 2023; Fraschini & Tao, 2023) lacks a systematic focus on the entire range of emotions.

Koreans in Australia and Australian-Korean multilingual and multicultural families

Although recent research shows that the first Korean migrant to Australia can be traced back to the 19th-century gold rush (Song, 2022), it was not until the eighties that the number of Korean migrants started showing a steep increase. Compared to 10,313 Koreans that migrated in the decade between 1981 and 1990, 37,197 people migrated between 2001 and 2010, an upward trend that makes the Korean community one of the fastest growing in Australia, a growth halted only by the COVID-19 pandemic. According to the 2021 Australian national census (ABS, 2021), there are 136,896 among 1st, 1.5, and 2nd generation Australian-Koreans, and Korean is the home language of 115,531 people, making it the thirteenth most widely spoken language in Australia.

In most Korean-speaking families in Australia, both parents are first-generation Koreans. In this environment, it is not uncommon to observe clashes regarding the FLP between Korea-born parents and Australia-born children (Fraschini, 2017). In comparison, Australian-Korean multicultural and multilingual families, i.e., those families where only one of the two parents speaks Korean, are still under-researched from the point of view of the FLP and how the language is used at home. According to the 2021 Australian national census (ABS, 2021), in Australian-Korean multicultural families, the mother is Korean in 5,608 cases, while the father is only in 1,587. In other words, Australian-Korean multilingual families where the

mother speaks Korean are about 3.5 times more common than families where only the father speaks Korean.

This chapter presents the analysis of data collected from participants living in Western Australia. Fraschini et al. (2024) noted that the emergence of a sizable Korean community in Western Australia is relatively recent compared to the Eastern states. The state accounts for only 6,970 speakers of Korean, of whom nearly 57% are represented by first-generation Koreans aged between 25 and 44 years old. Additionally, similarly to the national context, in Western Australia, multilingual families with a Korean-speaking mother are 3.7 times more common than multicultural families with a Korean-speaking father; however, there is one aspect that sets Western Australia apart from other states and territories. This is the net increase of Korean speakers, just below 80% in the years 2011-2016, a much higher rate than any other Australian state and territory (Fraschini et al., 2024). Therefore, while the Korean community in Western Australia shares many demographic similarities with the Eastern states, this paper not only explores emotions about FLP in Australia-Korean multilingual families in a generally underrepresented national context in the field but does so in the state where the number of speakers of Korean is growing at the highest rate.

Hence, our research questions are as follows.

RQ1. What emotions do family members feel regarding their language use within the family environment?

RQ2. Why do different emotional reactions exist, both within a family and across families?

Methodology

As outlined by Curdt-Christiansen and Iwaniec (2022), recent studies on emotions in multilingual families generally rely on surveys, memoirs, and interviews. The present study however applies Q methodology and therefore contributes to the methodological diversity needed in the current phase of FLP, characterised by "research questions that examine language competence not just as an outcome, but as a means through which adults and children defined themselves, their family roles, and family life" (King 2016, pp. 727-728).

Participants

After receiving Human Research Ethics approval from the University of Western Australia, the researchers approached a local Korean community school to ask for support in recruiting participants. At the time of the data collection, the school enrolled students from Korean or

Australian-Korean families, almost entirely of primary school age. The school also offered a Korean language course for a limited number of adult learners, primarily non-Korean parents of children enrolled in the school.

An announcement drafted in English and Korean was circulated through the parent online chat, and five families contacted the researchers to participate in the study. A sixth family was recruited through one of the researcher's personal networks. In most cases, all family members agreed to participate in the study; however, the non-Australian-born father of Family 5 and the children of Family 4 could not participate due to time limitations; similarly, two children of Family 3 did not take part in the project. Table 1 outlines the participating transnational, multilingual and multicultural families. Our group of participants reflects one of the main characteristics of Australian-Korean multicultural families, where it is common that the mother is Korean.

Table 1. Families and participating family members.[11]

Family	**Language(s) spoken at home**	**Family member**	**Participation (Y/N)**	**Notes**
Family 1	Korean only (mother) English/Korean (daughter)	Korea-born mother	Y	<5 years in Australia
		Daughter	Y	<5 years old
Family 2	English dominant	Korea-born mother	Y	>10 years in Australia
		Australia-born father	Y	Limited Korean proficiency
		Daughter	Y	<10 years old
Family 3	English 70%, Korean 30%	Korea-born mother	Y	>5 years in Australia

[11] The amount of language, English or Korean, spoken at home and expressed in percentage was reported by the family during the interview.

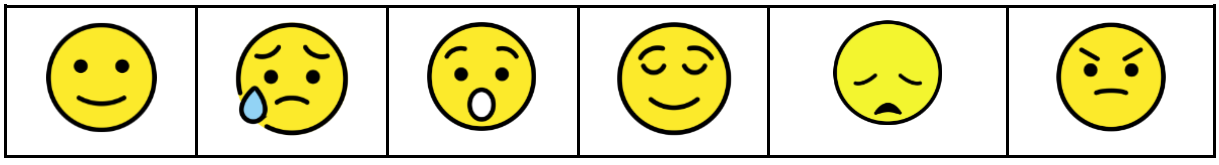
		Australia-born father	Y	Upper-intermediate Korean proficiency
		Son	Y	>10 years old
		Son	N	<10 years old
		Son	N	<5 years old
Family 4	Father speaks English only, mother speaks Korean only to children, children speak 90% English	Korea-born mother	Y	>10 years in Australia
		Australia-born father	Y	Limited Korean proficiency
		Son	N	<10 years old
		Daughter	N	<5 years old
Family 5	Korean 60% English 40%	Korea-born mother	Y	>10 years in Australia
		Asia-born father	N	Intermediate Korean proficiency
		Son	Y	<10 years old
Family 6	Korean only (mother), Almost English only (children)	Korea-born mother	Y	<10 years in Australia
		Daughter	Y	>10 years old
		Son	Y	>10 years old

Instruments

Most Q methodology studies begin with building the concourse by gathering statements regarding the research topic; however, images can also be used instead of statements. In this study, three main reasons are behind the decision to develop a visual Q sample. Firstly, a visual Q sample facilitates research with children that lack the ability to contribute, for instance, due to limited literacy skills, and improves their inclusion in the research process (Ellingsen et al., 2014, Lundberg & Hellström, 2022). Secondly, images overcome the issues of drafting statements in only one of the languages spoken within the family. Thirdly, images effectively communicate affect and emotions (Bai et al., 2019; Riordan, 2017). In this Q study, we used emojis for their potential to elicit children's voices in childhood research (Fane et al., 2018), for their validity to represent emotions cross-culturally (Jaeger et al., 2017), for the need to avoid possible racial stereotypes by choosing people's photographs, and because emojis make it possible to collect representations of a wide range of emotions.

The emoji-based concourse was built through the database developed by Kralj Novak et al. (2015) containing 751 emojis. To develop the Q sample, the authors conducted a first selection by discarding all emojis that did not represent a face and that did not represent an emotional reaction. This produced a set of 58 emotions which was further reduced to 20 by discarding possibly overlapping emojis and emojis describing a not clearly defined emotion but retaining emojis potentially representing different intensities of the same emotion. Three Korean women living in multicultural and multilingual families in Australia were then independently asked to label the 20 emojis by indicating the emotions represented. The final Q sample was finalised including the 17 emojis labelled with the same emotion and discarding three emojis that were interpreted differently. Even though the Q sample is small compared to most Q studies (Lundberg et al., 2020), the limited number of emojis was preferred to avoid excessive cognitive burden, particularly for participating children. For the final pictorial representation of the emojis, the researchers used open-source images with the addition of five emojis that were drawn for this study.[12] The Q sample is reported in Table 2.

Table 2. Q sample.



[12] With the exception of emojis n. 5, 8, 9, 13, and 15 drawn by the authors, the remaining emojis have been designed by OpenMoji – the open-source emoji and icon project. License: CC BY-SA 4.0.

1. happiness	2. sadness	3. surprise	4. serenity	5. disappointment	6. anger
					
7. negative surprise	8. suspicion	9. despair	10. remorse/ regret	11. love	12. confusion
					
13. happiness and shyness	14. boredom	15. embarrassment	16. strong happiness	17. strong anger	

The condition of instruction was carefully drafted to reflect the research question, and by keeping in mind that the term “language policy” may not have any meaning for young children, that families may have different language policies, and that even if a family has an overt language policy, this may not always be followed. Hence, the condition of instruction aimed to present to the study participant a situation where they could clearly recollect the use of different languages and the emotions associated with them, but at the same time a situation representative of most of the family's multilingual language life and not of just a single episode. We decided that the dinner table best represents a recurrent situation where all family members are together and speak multiple languages, and therefore the condition of instruction was drafted as *Please think now about how you feel, because of the languages used, when you and your family are at the dinner table and talk together. Now please sort the cards on the grid depending on how you often feel these emotions when Korean and English are used in that situation.*

The sorting grid was designed with seven columns, with the possibility to place only one emoji at each extreme, as in Table 3.

Table 3. Details of the sorting grid.

Column value	1 (-3)	2 (-2)	3 (-1)	4 (0)	5 (+1)	6 (+2)	7 (+3)
N. of emojis to sort	1	2	3	5	3	2	1

The value assigned to the columns on the grid shown to the participants was from 1 (emotion most often not felt) to 7 (emotion most often felt). However, the columns were successively re-coded from -3 to +3 for the analysis. This was done because, in previous studies conducted by the authors, some participants felt confused regarding the columns with a negative rating. Therefore, upon consideration that young children would have been asked to complete the sort, we preferred to show the value of the columns as in table 3, and to recode them at a later stage. Figure 1 shows a sort completed by one of the participants.

Figure 1. Sort completed by a participant.

Data collection and analysis

All data were collected face-to-face, in a place and at a time decided by the family, and all sessions were audio-recorded with permission of the participants. Family members completed their sorts individually. Before starting the sorts, parents were firstly asked some background questions, such as what their first language is, their time of residence in Australia (for Korean participants), whether they had been studying Korean and for how long (for non-Korean participants), and how often a certain language is spoken at home, and by whom. Parents were also asked whether their family has a stated language policy and how it is enacted. The short pre-sorting interview was conducted in a semi-structured format. After each participant completed the sort, they were asked to explain the position of their emojis on the grid. The pre- and post-sort interviews were used to inform the interpretation of the factors.

The researchers considered a two, three, and four-factor solution. The four-factor solution produced scattered results because of the limited number of participants, while a two-factor solution seemed to hide important differences across the participants. Therefore, a three-factor solution was deemed to have the best explanatory potential, with one of the factors foregrounding an emotional structure pertinent only to children. Factors were extracted with PCA and subjected to Varimax rotation. A significant loading for $p<0.01$ was calculated at +/- 0.63.

The results reported in the next section highlight the characteristics of the emotional structure of each factor, grouping participants with similar emotional reactions regarding the use of English and Korean in their family. The emotions used in the narrative description of each factor are not only those that have been ranked higher or lower than other emotions in the same factor, but also that are defining a factor in comparison to the other factors. In other words, relevant and defining emojis were considered both within and across factors. The number in brackets reported in the narratives indicates the rating of the emoji in the factor array of that factor on a scale from -3 to +3.

Results

At first glance, a Q methodology study shows the variety of different perspectives existing within a population regarding a certain topic. To contribute to a science of subjectivity, a Q methodology study should not be limited to demonstrating different perspectives but should also attempt to explain why such differences exist (Lundberg et al., 2023). The factor interpretations, therefore, respond to both research questions in this study.

Emotional reactions across families

Factor A

Nine sorts load on this factor. Four mothers, two fathers, two sons, and one daughter. At least one member from each family is represented by this factor, except Family 1, which is not represented.

The emotions most often felt by the participants represented by this factor regarding the use of both Korean and English within the family are love (+3) and strong happiness (+2). While these two emotions have also been ranked high in Factor C, the overall positive emotional outlook of Factor A is further reinforced by the feeling of serenity (+1) and by the low perception of negative emotions. For example, participants associated with this factor

assigned a low rate to both anger (-2) and strong anger (-3), indicating that usually they do not get upset because of issues of language use, and boredom (-1), indicating that they usually enjoy their use of different languages to communicate.

Factor B

Three sorts load on this factor, mother and daughter from Family 2, and a father from Family 4.

Compared to the previous factor, where clear positive affectivity transpired regarding the use of different languages by different family members, Factor B shows that not all family members feel positive emotions to the same strength and that some negative emotions can coexist with positive emotions. Although happiness (+3) emerged as the highest-ranked emotion in this factor, accompanied by a positive sense of surprise (+2), strong happiness (-1) and even love (-1) have a much lower ranking. This indicates that the participants loading on this factor, despite having a positive attitude toward the adoption of their language policy, nevertheless do not feel comfortable at all times. A reason for this can be found in the experience of a few negative emotions, such as confusion (+1), negative surprise (+1), and boredom (+1). This can be explained by considering that the two Australian fathers loading on this factor reported the lowest Korean language proficiency among the fathers participating in the study, which may cause discomfort because of a lack of understanding when mother and children speak in Korean. Nevertheless, a negative emotion such as strong anger (-3) has the lowest rating, indicating that the family language policy does not trigger strong negative emotional reactions.

Factor C

Two sorts load on this factor, a son and a daughter from different families. It must be noted that no parent loaded on this factor, making it the expression of the subjectivity of children only.

This factor, similarly to Factor B, shows the coexistence of both positive and negative emotions concerning language use within the family. However, as a major difference, both positive and negative emotions are more polarised, i.e. stronger, than the previous factor. Love (+3) and strong happiness (+2) emerged as the highest ranked, showing the strong positive emotions that these two children feel regarding the use of English and Korean. Nevertheless, this factor ranks high anger (+1) and strong anger (+1), indicating that there are situations that sometimes trigger strong negative emotional reactions in these children. This factor clearly

shows how strong anger and strong happiness can coexist in children of bilingual families regarding the family language policy and the use of more than one language. The children loading on this factor did not feel embarrassment (-2) or surprise (-2). It is noteworthy that if strong happiness was ranked high, on the other hand, happiness (-1) was ranked at a much lower level. We can perhaps argue that this difference may be due to the strong emotionality expressed by these children, or by the children's interpretation of the emoji that has been labelled as 'happiness'.

Emotional reactions within families

The factors indicate that the participants of this study have, broadly speaking, three different emotional reactions to the use of English and Korean in their family. A group of participants is positive, happy with their family language policy and love how English and Korean are used in their multilingual family (Factor A). A second group of participants is still happy with how the two languages are spoken by different family members; however, they cannot hide repeated events that trigger mild negative emotions (Factor B). A last group of participants, represented by two children, display strong positive emotions accompanied by strong negative emotions such as anger, although ranked at a lower level (Factor C). This may be explained by the fact that children, due to their neurological development, may demonstrate greater emotional reactivity than adults (Martin & Ochsner, 2016).

If, on the one hand, the three factors represent a variety of emotional reactions *across* families, on the other hand, it is necessary to look at the range of emotional reactions *within* each family to fully understand the dynamics of emotions in relation to FLP. All the members of Family 5 (mother and one child) and Family 6 (mother and two children) loaded on Factor A. Family 6 is represented by a single mother who speaks only Korean to her children but at the same time has always left her children free to express themselves in whichever language they prefer, which is predominantly English. As all family members in this case can understand English and Korean without problems, and since the mother does not enforce the use of Korean at home, the children feel positive emotions whenever they speak in English or their mother speaks in Korean. In Tang and Calafato's (2022a, p. 3) terms, Family 6 is among those families that "could represent a view of multilingualism and identity as malleable, evolving, and dynamic states".

Family 5 reflects a somewhat similar situation. The mother of Family 5 said that she tried to enforce a Korean-only policy on her child when he started primary school and switched from speaking Korean to speaking English. However, the Korean language enforcement made

him frequently upset and therefore now in the family every member is free to speak the language they prefer. She speaks only Korean, her child understands Korean but speaks in English, and her husband, who is from an Asian background and speaks a first language different from English, uses predominantly English but has a command of Korean that allows him to use the language in most everyday life situations, and a very positive attitude towards Korean culture. The mother is concerned for the future of her son's Korean language skills because she understands that making him attend the Korean community school is not enough; however, for the time being, she is happy with how everybody speaks and understands Korean and English at home.

Families whose members feel different emotions regarding their FLP are Family 2, 3, and 4. Among these three families, Family 3 is the only family where mother and father load on the same factor (Factor A), and where the father has extensive experience of living in Korea and possesses an intermediate level proficiency in Korean. This level of Korean language knowledge allows him to speak and understand Korean in all everyday life situations. Family 3 does not have a clearly established FLP, and they usually use both Korean and English daily. Due to speaking English at work (father) and at school (children), English is the language most used during the weekdays, while Korean is spoken more during the weekend when both father and children attend the local Korean community school. Mother and father of Family 3, overall feel the same positive emotions regarding the use of both languages because they are aware that everybody in the family is proficient in both, and nobody is ever excluded from any conversation. The son of Family 3 has no issues in speaking and understanding both Korean and English, and said he enjoys speaking Korean; however, if he speaks Korean too much, he said he gets tired and does not want to speak it. This sometimes temporary aversion to speaking Korean explains why he loads on a different factor where some negative emotion is foregrounded.

Mother and father of Family 4 load on two different factors. Family 4 adopts a *de-facto* one-parent-one-language (OPOL) policy. The mother speaks Korean all the time with her son, and her son replies in Korean 90% of the time. The father has learnt some Korean basics but cannot sustain an extended conversation and speaks only English at home. The mother, who loads on Factor 1, reported that she is happy with how English and Korean are used at home because, despite the comparatively limited vocabulary of her son, she is aware that without more extensive language contact it is not possible to attain a higher level of proficiency. She also reported episodes when, at the dinner table, she speaks Korean together with her son, and her son translates into English for his father. She notes that in these instances her son is very

proud of his Korean skills. These episodes may also explain why the father loads on Factor 2, where also emotions such as boredom and confusion were ranked highly, triggered by those instances where he is unable to fully follow a conversation.

The mother of Family 2 is the only mother loading on Factor B and not on Factor A. Her husband, instead, loads on Factor A. Similarly to Family 3, Family 2 as well adopts a one-parent-one-language policy; however, the parents try as much as they can to elicit an answer in Korean. Sometimes they get frustrated because although their daughter can perfectly understand Korean, they note that she tends to speak less Korean as she grows up. This was particularly marked in the past few years when the daughter started attending primary school and the family could not visit Korea due to COVID-19 related travel restrictions. Considering the relative lack of language contact, both parents overall are happy with their use of English and Korean; however, the mother is loading on Factor B due to her relatively high rating of negative surprise and disappointment, showing her concern for the fact that her daughters' Korean is not improving much. On the other hand, the father of Family 2 has a very positive attitude towards the Korean language and is trying to learn it. He is loading on Factor A thanks to the high rating of most positive emotions, despite him also ranking high the emoji showing confusion, which he feels when his wife and his daughter talk too long in Korean and he cannot understand what is going on.

A focus on discrete emotions

The consideration of consensus and disagreement emotions provides further insights into the relation between emotions and FLP in the context under examination.

The emotion labelled happiness and shyness showed the highest consensus, being rated +2 in all factors. This result underscores once more the overall positive emotionality that emerged from all factors, and finds further confirmation in remorse/regret being rated -2 in Factor A and B, and -3 in Factor C. In other words, the results show that overall, the participants of this study, despite unavoidable differences, are happy with how English and Korean are used in their family and do not have regrets regarding language use choices. This means that parents, as they often reported in the interviews, recognise that they are doing their best to let their children learn and speak Korean within the limitations of living in a predominantly English-speaking context.

A statistical consensus also emerged for disappointment (with a 0 rating in all factors) and negative surprise (0 for Factor A and C, and +1 for Factor B). In Q methodology, a consensus regarding the statements placed in the middle column of the grid does not indicate a

lack, in this case, of a particular emotion; instead, it indicates that the emotion, despite lacking significance compared to the others (Brown, 1980), nevertheless can be "quite revealing" (Brown, 2005, p. 18). In other words, it is an emotion that can be considered lying in the background of the other emotions (Lundberg et al., 2023). If disappointment and negative surprise are to be seen in this light, it is possible to conclude that, in the background, the participants of the study wish to be able to do more to foster their children's bilingual skills and try to avoid a sharp decline in the children's Korean language proficiency. This aspect finds confirmation in the interviews, where parents often pointed out that they wish their children to be able to speak more Korean, although at the same time they acknowledge the environmental constraints, and therefore accept and are happy with the current situation.

The emotions that emerged with the largest statistical disagreement across factors are love, surprise, and strong anger. Despite being the highest rated emotion in Factor A and C, Love has a rating of -1 in Factor 2. This further confirms that for Factor B, less strong positive emotions were used to describe the feelings that the family members have regarding their FLP. Surprise has a positive rating in Factor A and B, but a negative rating in Factor C. This may indicate that this emotion is more related by parents than children, as only children load on Factor C. Also, strong anger, one of the most intense negative emotions included in the Q sample, can be interpreted in a similar fashion. This emotion has been ranked at the lowest in Factor A and Factor B, but positively in Factor C, which leads to the hypothesis that it may be more relevant to children than parents.

Discussion

This study intended to holistically look at translingual multilingual family members' emotions regarding their language use at home, without setting to focus on any a priori discrete emotions, or emotions with a specific valence. As a result, three different factors, all with a unique composition of emotions could be described. Across the three factors, positive emotions were the most prominent. It is possible to argue that within each family there was already a positive attitude toward Korean and bilingualism, as five out of six families were recruited through the local Korean community school.

The families in our study did not have any clear pre-established language policy, and their use of different languages within the domestic environment reflects that of multilingual and multicultural families in many other contexts. However, this chapter goes beyond showing how languages are used in multilingual homes, and tries to address the issue of what emotions are triggered by such languages use.

The families acknowledged having language practices that developed through time under specific circumstances, and overall showed positive emotions regarding their language use. However, similar to the transnational multilingual families studied by Tang and Calafato (2022b), some participants in this study showed emotions in tension regarding their language use at home. For example, the mothers of Family 5 and Family 6 reported that they tried to enforce a Korean-only policy. As disclosed in the pre-sorting interviews, they realised later that this was either creating anxiety in their child (Family 5) or impossible to implement (Family 6). The result is that they accepted the fact that their children will probably be more comfortable speaking in English. Hence, as a practical implication of this research, we suggest transnational multilingual families accept the limitations of the environment and, within these limitations, provide their children with as many opportunities as possible to use Korean. In other words, transnational multilingual families are well-advised to embark on the challenging balancing act between avoiding enforcing any language upon their children and supporting them in their multilingual development.

This study also helps to raise awareness of the complexity of different family language policy strategies. Even though parents implementing OPOL may indicate a somewhat outdated view of multilingualism, consisting of "a series of disconnected monolingualisms" (Tang & Calafato, 2022a, p. 3), Family 4 could illustrate how such a strategy also creates moments of positive emotions, such as pride, when the child can translate the mother's Korean into English for the father.

A more nuanced investigation, potentially in a longitudinal design, would yield findings more explicitly connected to the temporal aspect of our respondents' move and residence in Australia. This is further intensified by the dynamics of changing proficiency levels of family members. While adults may initially be more proficient in English, their children might at some point surpass and reach a higher proficiency level than their parents (Hirsch & Lee, 2018). Also changing family structures, e.g., through the arrival of siblings who might eventually undermine a multilingual family language policy (Caldas, 2012), could be an interesting aspect to focus on in a follow-up study. Siblings may significantly impact the use of the home language(s) and consequently related emotional experiences. Unfortunately, the only family where more than one child participated in our study was Family 6, therefore we were not able to collect sufficient data on the role that more siblings play with regard to language(s) use and emotions.

Finally, a similar study in a context where English is not the dominant language of the society might provide some information concerning the role of the language of the community.

Our data hint that any other language with potentially less linguistic capital might lead to more positive emotions regarding the respondents' heritage language and that whether both parents are proficient in both languages could make a considerable difference.

Conclusion

Compared to other techniques used to investigate FLP, this chapter shows that Q methodology provided the opportunity to investigate the subject from three different perspectives, i) across members of different families ii) within members of the same family, and iii) from the point of view of discrete emotions. In order words, Q methodology allowed us to zoom out to show a broad picture of emotions in multilingual and multicultural families, and then to zoom in to offer a fine-grained discussion of discrete emotions. Furthermore, using a visual Q sample consisting of emojis facilitated data collection from young children.

Lastly, we acknowledge that the use of different languages by the families participating in this study does not present major differences compared to other multilingual families previously presented in the literature. Therefore, the results presented here, in terms of emotions, can be taken into consideration with regard to families in different multilingual and multicultural contexts.

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References

ABS, Australian Bureau of Statistics (2021). *National Census Data, [https://www.abs.gov.au/census/find-census-data/search-by-area]*, accessed 29 September 2022

Bai, Q., Dan, Q., Mu, Z., & Yang, M. (2019). A systematic review of emoji: Current research and future perspectives. *Frontiers in Psychology*, 10, 2221, http://doi.org/10.3389/fpsyg.2019.02221

Brown, S. (1980). *Political subjectivity: Applications of Q methodology in political science*. Yale University Press.

Brown, S. (2005). The science of subjectivity: Methodology, identity, and deep structures. *Journal of the Korean Society for the Scientific Study of Subjectivity*, 11, 5–31.

Caldas, S. J. (2012). Language policy in the family. In B. Spolsky (Ed.), *Cambridge handbook of language policy* (pp. 351–373). Cambridge University Press.

Curdt-Christiansen, X. L. (2016). Conflicting language ideologies and contradictory language practices in Singaporean bilingual families. *Journal of Multilingual and Multicultural Development*, 37(7), 694–709.

Curdt-Christiansen, X. L., & Iwaniec, J. (2022). '妈妈, I miss you 😭': Emotional multilingual practices in transnational families. *International Journal of Bilingualism*, 00(0), 1–22, http://doi.org/10.1177/13670069221125342

De Houwer, A. (2015). Harmonious bilingual development: Young families' well-being in language contact situations. *International Journal of Bilingualism*, 19(2), 169–184, https://doi.org/10.1177/1367006913489202

De Houwer, A. (2020). Harmonious bilingualism: Well-being for families in bilingual settings. In S. Eisenchlas, & A. Schalley (Eds.), *Handbook of social and affective factors in home language maintenance and development* (pp. 63–83). Mouton de Gruyter.

Dewaele, J.–M., & Pavelescu, L. M. (2021). The relationship between incommensurable emotions and willingness to communicate in English as a foreign language: A multiple case study. *Innovation in Language Learning and Teaching*, 15(1), 68–80. https://doi.org/10.1080/17501229.2019.1675667

Duff, P. A. (2015). Transnationalism, Multilingualism, and Identity. *Annual Review of Applied Linguistics*, 35, 57–80, http://doi.org/10.1017/S026719051400018X

Ellingsen, I. T., Thorsen, A. A., & Størksen, I. (2014). Revealing children's experiences and emotions through Q Methodology. *Child Development Research*, vol. 2014, 910529, http://dx.doi.org/10.1155/2014/910529

Fane, J., MacDougall, C., Jovanovic, J., Redmond, G., & Gibbs, L. (2018). Exploring the use of emoji as a visual research method for eliciting young children's voices in childhood research. *Early Children Development and Care*, 188(3), 359–374.

Fraschini, N. (2017). I thought that I don't qualify to call Korean my 'national language': Identity and authenticity in Korean-Australian heritage language learners. *Journal of Korean Language Education*, 28 (English Edition), 45–80.

Fraschini, N. (2023) Language learners' emotional dynamics: insights from a Q methodology intensive single-case study. *Language, Culture and Curriculum, 36*(2), 222–239. https://doi.org/10.1080/07908318.2022.2133137

Fraschini, N., Elfving-Hwang, J., & Tao, Y. (2024). Korean language education in Western Australia: Development and challenges. In J. Kinder, N. Fraschini, and M. Caruso (Eds.), *Enabling learning: Language teaching for Australian Universities*. ANU Press.

Fraschini, N., & Tao, Y. (2023). How epistemic anxiety and curiosity link perceived value and intended efforts in the language classroom. *Annual Review of Applied Linguistics, 43*, 23–40. https://doi.org/10.1017/S0267190523000041

Hirsch, T., & Lee, J. S. (2018) Understanding the complexities of transnational family language policy. *Journal of Multilingual and Multicultural Development*, *39*(10), 882–894, http://doi.org/10.1080/01434632.2018.1454454

Jaeger, S. R., Vidal, L., Kam, K., & Ares, G. (2017). Can emoji be used as a direct method to measure emotional associations to food names? Preliminary investigations with consumers in USA and China. *Food Quality and Preference* 56, 38–48.

King, K., (2016). Language policy, multilingual encounters, and transnational families. *Journal of Multilingual and Multicultural Development,* 37(7), 726–733, https://doi.org/10.1080/01434632.2015.1127927

King, K., & Fogle, L. (2006). Bilingual parenting as good parenting: Parents' perspectives on family language policy for additive bilingualism. *International Journal of Bilingual Education and Bilingualism,* 9(6), 695-712, http://doi.org/10.2167/beb362.0

Kralj Novak, P., Smailović, J., Sluban, B., & Mozetič, I. (2015). Sentiment of emojis. *PLoS ONE,* 10(12), e0144296, https://doi.org/10.1371/journal.pone.0144296

Lundberg, A., de Leeuw, R., & Aliani, R. (2020). Using Q methodology: Sorting out subjectivity in educational research. *Educational Research Review*, 31, 100361, https://doi.org/10.1016/j.edurev.2020.100361

Lundberg, A., Fraschini, N., & Aliani, R. (2023). What is subjectivity? Scholarly perspectives on the elephant in the room. *Quality and Quantity, 57*, 4509–4529. https://doi.org/10.1007/s11135-022-01565-9

Lundberg, A., & Hellström, L. (2022). Q methodology as an innovative addition to bullying researchers' methodological repertoire. *International Journal of Bullying Prevention,* 4, 209–219, https://doi.org/10.1007/s42380-022-00127-9

Martin, M., & Ochsner, K. (2016). The neuroscience of emotion regulation development: implications for education. *Current Opinion in Behavioral Sciences, 10*, 142–148. https://doi.org/10.1016/j.cobeha.2016.06.006

Piller, I., & Gerber, L. (2021) Family language policy between the bilingual advantage and the monolingual mindset. *International Journal of Bilingual Education and Bilingualism*, 24(5), 622–635, http://dx.doi.org/10.1080/13670050.2018.1503227

Riordan, M. A. (2017). Emojis as tools for emotion work: Communicating affect in text messages. *Journal of Language and Social Psychology*, 36(5), 549–567.

Sevinç, Y. (2020). Anxiety as a negative emotion in home language maintenance and development. In S. Eisenchlas, & A. Schalley (Eds.), *Handbook of social and affective factors in home language maintenance and development* (pp. 84–108). Mouton de Gruyter.

Sevinç, Y. (2022). Mindsets and family language pressure: language or anxiety transmission across generations?, *Journal of Multilingual and Multicultural Development*, https://doi.org/10.1080/01434632.2022.2038614

Sevinç, Y., & Mirhavedi, S.H. (2022). Emotions and multilingualism in family language policy: Introduction to the special issue. *International Journal of Bilingualism*, 0(0), 1–14. https://doi.org/10.1177/13670069221131762

Song, J. (2010). Language ideology and identity in transnational space: Globalization, migration, and bilingualism among Korean families in the USA. *International Journal of Bilingual Education and Bilingualism*, 13(1), 23–42. https://doi.org/10.1080/13670050902748778

Song, J. (2022, July 19). Retracing the steps of John Corea, the 'first' Korean-Australian. *SBS Korean*. https://www.sbs.com.au/language/korean/en/article/retracing-the-steps-of-john-corea-the-first-korean-australian/32r3bbohz

Spolsky, B. (2012). Family Language Policy – the critical domain. *Journal of Multilingual and Multicultural Development*, 33(1), 3–11, http://doi.org/10.1080/01434632.2011.638072

Tang, F., & Calafato, R. (2022a). Transnational multilingual families in China: Multilingualism as commodity, conflict, and in-betweenness. *SAGE Open*, *12*(1). https://doi.org/10.1177/21582440221082129

Tang, F., & Calafato, R. (2022b). «You have to repeat Chinese to mother!»: Multilingual identity, emotions, and family language policy in transnational multilingual families. *Applied Linguistics Review*, https://doi.org/10.1515/applirev-2021-0173

Tannenbaum, M. (2012). Family language policy as a form of coping or defence mechanism. *Journal of Multilingual and Multicultural Development*, *33*(1), 57–66.

Zhu, H., & Li, W. (2016). Transnational experience, aspiration and family language policy. *Journal of Multilingual and Multicultural Development*, 37(7), 655–666. https://doi.org/10.1080/01434632.2015.1127928

Appendices

A. Factor Arrays.

	Emotion	**Factor A**	**Factor B**	**Factor C**
1	happiness	1	3	-1
2	sadness	-1	0	-1
3	surprise	1	2	-2
4	serenity	1	0	0
5	disappointment	0	0	0
6	anger	-2	-1	1
7	negative surprise	0	1	0
8	suspicion	0	-2	0
9	despair	-1	0	0
10	remorse/regret	-2	-2	-3
11	love	3	-1	3
12	confusion	0	1	1
13	happiness and shyness	2	2	2
14	boredom	-1	1	-1
15	embarrassment	0	0	-2
16	strong happiness	2	-1	2

17	strong anger	-3	-3	1

B. Factor loading. In the Q sort column, the number indicates the family, the letter indicated mother (M), father (F), daughter (D), son (S).

Q sort	Factor A	Factor B	Factor C
1_D	0.3527	0.0804	**0.7705**
1_M	0.3901	-0.0091	0.4793
2_D	0.2875	**0.7095**	0.261
2_F	**0.6614**	0.2034	0.2756
2_M	0.3626	**0.7161**	-0.2822
3_F	**0.8688**	0.1163	0.2188
3_M	**0.8474**	0.1256	0.1671
3_S	0.0755	-0.0704	**0.8941**
4_F	-0.0297	**0.8937**	0.0024
4_M	**0.8411**	0.405	0.2564
5_M	**0.6647**	0.3065	0.5086
5_S	**0.6347**	0.1263	0.586
6_M	**0.9148**	0.1104	0.1482
6_D	**0.7071**	0.2047	0.5582
6_S	**0.6208**	0.4979	0.4522

Part 2

Q methodology to expand research on in-service and pre-service beliefs

Chapter 5

Pre-Service teachers' beliefs about multilingualism before and after participating in an identity-oriented intervention

Nicola Morea

Multilingualism in England

The importance of researching pre-service teachers' beliefs about multilingualism stems from the increased multilingualism of today's schools and classrooms. In the context of compulsory education in England, schools are indeed becoming increasingly multilingual. In 2021, almost 20% of the student population was considered to speak a language other than English (EAL) at home (21.2% in primary schools and 17.5% in secondary schools) (DfE, 2022). At the same time, all students in England are required to study at least one additional language in primary school and in the first stage of secondary education (Key Stage 3, students aged 7-11 years). Taking an inclusive view of multilingualism that encompasses students' home languages, dialects, language varieties and languages learnt at school (Fisher et al., 2020), it can be argued that multilingualism, rather than monolingualism, is the norm in today's classrooms in England.

Despite the lack of explicit national policies on multilingualism in the country, researchers have stressed the need for all teachers to be linguistically responsive, as to ensure that the full linguistic repertoire of all learners is valued, recognised and drawn from in the learning process (Foley et al., 2018; Liu & Evans, 2016; Lucas & Villegas, 2013). Arguably, future teachers need, today more than ever, to be able to confidently work in multilingual environments, irrespective of the subject(s) they teach or the age group of their students. This can be a challenging task for aspiring teachers who may have limited understanding and awareness of languages and multilingualism, especially if training to teach subjects distant from languages (Foley et al., 2018). Therefore, providing primary and secondary pre-service teachers (irrespective of the subject taught) with opportunities to explicitly reflect on their conceptualisation of multilingualism, multilingual self-perceptions and beliefs during initial teacher education and training (ITET) may represent an effective way to challenge prescriptive beliefs about multilingualism, such as a "language-as-a-problem" orientation towards students with EAL (Vikøy & Haukås, 2021). Furthermore, these opportunities allow pre-service

teachers to consider their own and their students' full linguistic repertoire as a valuable resource in the classroom (Alisaari et al., 2019).

Teachers' beliefs about multilingualism

The study adopts the definition of beliefs proposed by Borg (2011), who describes teacher beliefs as "propositions individuals consider to be true and which are often tacit, have a strong evaluative and affective component, provide a basis for action, and are resistant to change" (p. 370). Nonetheless, Borg (2011) also recognises the powerful role that teacher education can play in shaping pre-service teachers' beliefs by acknowledging that "through teacher education teachers' beliefs can be strengthened and extended" (p. 378). Indeed, the formation of teachers' beliefs is a crucial element of teacher education which may be linked to teacher practices (Griva & Chostelidou, 2012; Haukås, 2016; Portolés & Martí, 2020). In particular, the last few years have seen a surge in research on teachers' beliefs in relation to *multilingualism*. Most of this body of research has tended to focus on teachers' beliefs about linguistically inclusive approaches (e.g., Alisaari et al., 2019; Llompart & Birello, 2020; Schroedler & Fischer, 2020; Vikøy & Haukås, 2021; Woll, 2020). Much more rarely have researchers investigated teachers' personal beliefs about language and multilingualism (De Angelis, 2011; Haukås, 2016; Lundberg 2019a, 2019b; Woll, 2020), and especially in the context of England. Additionally, most studies have focused on in-service and (albeit less frequently) pre-service *language* teachers (e.g., Alisaari et al., 2019; Calafato, 2020; Haukås, 2016; Lundberg, 2019a; 2019b), with far fewer studies exploring the beliefs of (pre-service) teachers of other subjects.

From a methodological perspective, many studies investigating teachers' beliefs about multilingualism have tended to rely on quantitative surveys, which, according to Borg (2016), still represent the dominant method in teacher-belief research. Despite the clear advantage of surveys to reach a large sample and make inferences on the population of reference, the use of questionnaires alone to elicit teachers' beliefs has limitations: teachers can provide responses that they feel are socially accepted (Schroedler & Fischer, 2020), questionnaire items are rated in isolation from each other (Lundberg, 2019a) and, finally, it may be difficult to gather in-depth responses, unless questionnaires are supplemented with qualitative methods (Borg & Alshumaimeri, 2019). Arguably, the use of traditional quantitative methods may limit the examination of teachers' beliefs to an assessment of average scores respondents assigned to individual items, thus focusing on whether respondents expressed an *overall* positive or negative viewpoint in relation to *isolated* items. Consequently, surveys may not be suitable to explore the complex interplay between inter-connected beliefs. An emerging methodological

avenue for the exploration of teacher beliefs about multilingualism has been pioneered by Lundberg (2019a, 2019b) and involves the use of Q methodology (Q) to identify distinct *patterns* of beliefs held by like-minded teachers within a sample (Camenzuli et al., 2023; Lundberg, 2019a; 2019b). Interestingly, whilst empirical studies that used Likert items to investigate teachers' beliefs about multilingualism found that teachers tended to express positive beliefs in relation to multilingualism (Calafato, 2020; Alisaari et al, 2019; Portolés & Martí, 2020; De Angelis, 2011), Q methodological studies have uncovered a more complex picture. For example, Lundberg's study in Sweden (2019a) revealed the presence of different configurations of beliefs among a sample of in-service, primary-school teachers, characterised by differences in the way teachers conceptualised multilingualism and in the types of benefits that they associated with being multilingual.

The above reflections, emerging from cross-sectional studies, can also be applied to longitudinal studies focusing on the development of teachers' beliefs about multilingualism over time or after specific interventions. In this regard, the few longitudinal studies on teachers' beliefs about multilingualism have also relied on questionnaires as the main method for data collection and analysis (Fischer & Lahmann, 2020; Gorter & Arocena, 2020; Schroedler & Fischer, 2020), with virtually no study having collected and analysed Q sorts by the same participants at different time points. As shown in Morea (2022), the paucity of longitudinal Q studies across research fields may be explained by a lack of methodological guidance on how to conduct within-group analysis of Q sorts, a methodological gap that this study contributes to addressing.

Research aims

This research has two overarching aims. Firstly, it aims to explore what beliefs about multilingualism pre-service teachers in England may hold at the start of an ITET programme. This is important given the lack of research exploring pre-service teachers' multilingual (self-)beliefs in the English national context, and the consequent need for ITET providers to be aware of the diversity of language-related beliefs and experiences among student teachers. Secondly, the study aims to assess whether explicit interventions encouraging pre-service teachers to reflect on their language beliefs can favour processes of belief development during teacher education and training. If these types of interventions proved to be beneficial for student teachers, they may enhance current ITET provision on linguistically inclusive teaching.

Context and participants

The context of the study was primary and secondary ITET in England. The research participants were graduates enrolled in a recognised British ITET provider and who were training to teach any subject at either primary or secondary level.

Participant recruitment was voluntary and conducted using two approaches. The study was advertised to all the pre-service teachers enrolled in a large teacher education provider through the support of the programme managers. In parallel, the study was also advertised on social media via the Twitter and Facebook websites to reach pre-service teachers from other ITET providers. Permission from administrators was sought before posting on the Facebook groups and pages. It was highlighted that the study was open to pre-service teachers training to teach any subject at primary and secondary level, and that no experience with learning, speaking or teaching additional languages was required or preferred. Fifty-one participants completed a Q sort in October 2020, 16 of whom also participated in the intervention and completed a second, identical Q sort in May 2021.

Q-sample development

The study used the Q sample designed by Lundberg (2019a, 2019b) to explore Swedish and Swiss primary teachers' personal beliefs about multilingualism and adapted it to reflect positions on multilingualism relevant to the English context. For example, more representation was given to viewpoints regarding the role of other languages in the English society, and new items were taken from published research on teachers' beliefs about multilingualism (Calafato, 2020; De Angelis, 2011; Fisher et al., 2020; Portolés & Martí, 2020). Additionally, the overall number of statements referring to the benefits of being multilingual was reduced, since studies on teachers' beliefs have shown that (pre-service) teachers across national contexts tend to agree that multilingualism provides social and linguistic advantages. Finally, items reflecting an inclusive view of multilingualism were added (e.g., item 16: "everyone is multilingual"), which aligns with the content of the intervention. The adapted Q sample was examined by a teacher educator and expert in language education, and then piloted with a group of 12 pre-service teachers. The resulting Q sample consisted of 30 statements (Table 1).

The intervention

Inspired by other identity-oriented interventions designed for the languages classroom (Fisher et al., 2020), the intervention consisted of an online, self-paced course which tackled the topic of multilingualism from different perspectives. It lasted approximately 10 hours and was structured around three themes. Each theme consisted of two pre-recorded videos and two

reflective activities, which encouraged participants to reflect on the extent to which the video content related to their personal and professional experience. In theme one, participants reflected on the meaning of multilingualism and on their own conceptualisations of the term. They were also invited to consider monolingualism and multilingualism as the two ends of a continuum, and to reflect on their own linguistic repertoire and the extent to which they would consider themselves multilingual. In theme two, these reflections on multilingualism and linguistic repertoire were extended to the school context. By considering the findings from empirical research (e.g., Evans et al., 2020; Liu et al., 2017), participants reflected on the relationship between students' language, identity and social integration and on how schools can respond to an increasingly multilingual student population in the form of language policies and practices. Finally, theme three encouraged participants to use pedagogical approaches aimed at both promoting the academic, linguistic and social inclusion of EAL students in the classroom, and at increasing students' linguistic (self-)awareness.

Participants were given a timeframe of approximately five months to engage with the intervention. This approach was chosen in consideration of the fact that participants had limited time to engage with the research project, being enrolled in a full-time ITET programme. The online and self-paced format thus gave participants more flexibility on when and to what extent to access the intervention content. Participants were nonetheless given a recommended timeline, which encouraged them to engage with one of the six videos and related activities every two weeks. Fortnightly email reminders were sent accordingly.

Data collection, participant characteristics and analytical procedure

In October 2020, 51 participants completed the first sorting activity on the Q-sorTouch website.[13] They were asked to sort a Q sample of 30 statements (which were presented in random order) onto a pre-defined grid (ranging from -4 to +4) based on their level of agreement. After the sorting activity, participants were shown the statements they had placed in each column of the grid and given an opportunity to explain the reasons for their choices.

Of the 51 participants, 14 (27.5%) were pre-service primary-school teachers, and 37 (72.5%) were secondary-school teachers. Of the latter group, 15 (29.4% of the sample) were training to teach Modern Languages, 13 (25.5%) a subject related to Arts and Humanities (e.g., Drama, English, History, Geography) and nine (17.6%) a STEM subject (e.g., Mathematics, Biology, Physics). Forty-three participants identified as female (84.3%), seven as male (13.7%)

[13] https://www.qsortouch.com

and one participant preferred not to say. Finally, participants' age ranged from 21 to 52, *M* = 28, SD = 7.9.

The Q sort data were downloaded from the QsorTouch website and uploaded on the software KADE (Banasick, 2019) to conduct Q method analysis. Q factors were extracted using principal component analysis (PCA) and rotated using Varimax. The use of PCA with Varimax rotation represents a common analytical approach in Q methodological studies and the most used combination in Q methodological studies in the education field (Lundberg et al., 2020). This procedure was also used in Lundberg (2019a, 2019b), the two studies from which the Q sample used in this project were adapted. A three-factor solution was selected after examination of the scree plot, overall explained variance and number of Q sorts significantly and strongly loading on each potential factor. The factor solution accounted for 54% of the study variance and each factor was defined by at least two Q sorts with a factor loading $r \geq 0.7$.

The next stage of the analytical process involved flagging the Q sorts that would define each of the three factors. Although 47/51 Q sorts showed statistically significant loadings at the 0.05 level, 29/51 Q sorts loaded significantly on more than one factor. These Q sorts, commonly referred to as confounded, represent a common occurrence in Q methodological studies. Given the larger number of confounded Q sorts, and in line with Watts and Stenner's (2005) recommendation, it was decided to raise the threshold of significance to ± .40, so that only Q sorts with a factor loading ≥ ±0.40 on two or more factors were excluded as confounded. As a result, the number of confounded Q sorts decreased from 29 to 19, and, for consistency, this threshold was also used in the posttest Q method analysis.

Factors were interpreted by examining their factor arrays and factor scores using the crib-sheet method (Watts & Stenner, 2012) to facilitate comparison between factor scores. Additionally, factor interpretation was guided by an analysis of participants' comments

explaining the reasons behind their sorting decisions. The factor-array values of the 30 statements in the Q sample by each of the three extracted factors can be found in Table 1.

Table 1. Q sample with factor-array values. Distinguishing statements are indicated in bold.

	F1	**F2**	**F3**
1. Knowing multiple languages makes it easier to learn additional languages.	**+4**	**+1**	**+3**
2. Being multilingual can help a student with all subjects in the curriculum.	+1	0	0
3. Multilingualism increases the capacity to use effective reading strategies.	0	+2	+1
4. Multilingualism provides cognitive advantages.	+3	+4	**+2**
5. Multilinguals are more open to other cultures and languages.	**+3**	0	0
6. Knowing a dialect does not make one multilingual.	-2	-1	**0**
7. Multilingual students are more flexible in their thoughts.	+2	+1	0
8. Students who know several languages will have more opportunities to succeed in their professional life.	+3	+2	+2
9. Multilingual students are less proficient in their first language(s) compared to monolingual students.	-3	-3	-3
10. Multilingual students have a more expanded vocabulary.	+1	**+2**	+1
11. In our society it is important to know several foreign languages.	**+2**	-1	-1
12. Monolingually raised children can become multilingual.	**+4**	+1	+3
13. Multilingual students can speak all their languages fluently.	-3	-2	-2
14. Learning different languages at the same time is a source of confusion.	0	-1	-1
15. Our society is predominantly monolingual.	**+1**	**-3**	**+4**

16. Everyone is multilingual.	**0**	**-4**	**-3**
17. Multilingual students benefit from using their first language(s) at home.	+1	**+3**	+1
18. The presence of many foreign languages in a country can reduce the importance of national languages and associated cultures.	-3	**0**	-4
19. In English schools, multilingual students are a minority compared to monolingual students.	**0**	**0**	**+3**
20. In education, multilingualism receives more attention than necessary.	-2	-2	**-4**
21. Multilingualism is a consequence of immigration.	0	0	**-2**
22. Multilingual students who are learning English are ashamed of using their first language(s) in school.	0	**-2**	0
23. Some languages are more important than others.	**-4**	**-3**	**+1**
24. It is better to learn one language at a time.	-1	-1	-1
25. Learning additional languages improves knowledge of previously learned languages.	**+2**	+3	+4
26. It is harder for multilingual students to develop a harmonious identity.	-2	0	-1
27. When multilingual students switch between languages, they switch between independent language systems.	-1	+1	0
28. A multilingual student can develop fully as a person only if they are given opportunities to use their full linguistic repertoire.	**-1**	**+4**	**-2**
29. A multilingual person is someone who can communicate in more than two languages.	**-1**	+3	+2
30. Multilingualism hinders social cohesion.	-4	-4	-3

Findings: Pre-Service Teachers' Beliefs at Baseline

Consensus among Participants

The three language-beliefs factors were moderately (with *r* ranging from .483 to .608) and significantly correlated ($p < .01$) with each other. This indicates that pre-service teachers in the sample tended to agree on a wide number of statements, while taking distinct positions on others.

Across the three factors, participants strongly believe that multilingualism is not a threat for a country's social cohesion (30, F1 -4, F2 -4, F3 -3). Instead, participants tend to believe that being multilingual provides a series of benefits: across factors, multilingualism is thought to increase cognitive abilities (04, F1; +3; F2 +4; F3 +2) such as cognitive flexibility (07, F1 +2; F2 +1; F3 0), even though this belief is stronger for F1 and F2 than for F3. However, there is a common degree of uncertainty on whether being multilingual can help a student across all the school subjects (02, F1 +1; F2 0; F3 0). Regarding social benefits, participants tend to agree that knowing several languages can provide more job opportunities (08, F1 +3; F2 +2; F3 +2). Participants loading on different factors tend to rather strongly disagree that multilingual students are fluent in all their languages (13, F1 -3; F2 -2; F1 -2) and, at the same time, that they are less proficient in their L1s compared to their monolingual peers (09, F1 -3; F2 -3; F3 -3). They also tend to slightly disagree with the idea that it is better to learn one language at a time (24, F1 -1; F2 -1; F3 -1) and that learning multiple languages at the same time is a source of confusion (14, F1 0, F2 -1, F3 -1). Finally, participants across factors tend to slightly disagree with the idea that multilingual students may struggle to develop a harmonious identity compared to monolingual students (26, F1 -2; F2 0; F3 -1).

The intercorrelations between extracted factors and the degree of consensus across items may be partly due to the purposive sampling. Equally, this finding aligns with previous research showing that (pre-service) teachers across various national contexts tend to hold generally positive views about, and dispositions towards, multilingualism. However, important differences emerged that distinguish each of the three extracted factors.

Interpreting Factor F1

Factor F1 had an eigenvalue of 21.63 and explained 25% of the study. Seventeen participants were significantly and uniquely associated with this factor, while nine additional Q sorts loading significantly on F1 were confounded. Of the 17 participants, 15 identified as female and two as male; the mean age in years was 25.65 (*Mdn* = 23). Three participants were training to teach at primary level and 14 at secondary level, of which seven to teach ML and

seven an Arts and Humanities subject (three English, one English with Drama, two History and one Religious Studies).

According to these pre-service teachers, one does not need to be able to communicate in several languages to be multilingual (29, -1), and even knowing a dialect in addition to an L1 is enough to be considered multilingual (06, -2). This view is expressed in participant 32's post-Q-sorting reflection: "I am not sure multilingualism has such a specific definition of 'must communicate in multiple languages' – I consider it to be more subjective to the person's thoughts and experiences of a language" (participant 32, subject taught: English and Drama). According to these future teachers, everyone has the potential to become multilingual, not only those raised in a bi/multilingual environment (12, +4) and, in fact, it cannot be excluded that everyone is, to some extent, multilingual (16, 0). This way of understanding multilingualism is summarised by participant 17:

> Multilingualism doesn't necessarily connote fluency – any level of learning (and using?) an additional language could be considered 'multilingual'. Learners are no less multilingual for being learners, and even among advanced learners, there are varying levels of fluency.

Despite this non-prescriptive view of multilingualism, future teachers aligning with profile F1 do not perceive their society as multilingual (15, +1), and multilingual students in English schools are neither the exception, nor the norm (19, 0). Multilingualism does not, however, attract more attention in education than necessary (20, -2), and it is important for students to learn additional languages (11, +2), without any hierarchy among them, as all languages are equally important (23 +4).

Interpreting Factor F2

Factor F2 had an eigenvalue of 3.277 and explained 14% of the study variance. Six participants were significantly and uniquely associated with this factor, while three additional participants' Q sorts were confounded. All six participants identified as female, and their mean age was 26.67 (*Mdn* = 24). Three participants were training to become primary teachers, two to become ML teachers and one an English teacher in secondary schools.

These pre-service teachers most strongly reject the idea that everyone is multilingual (16, -4), as being multilingual means being able to communicate in three or more languages (29, +3), as implied in participant 51's comment: "I do not agree that everyone is multilingual,

as there are many people who not only speak just their native language, they have bad command of it" (Participant 51, Modern Languages). Perhaps because of this belief, pre-service teachers loading on F2 are the ones who least strongly agree with the idea that one may become multilingual even if raised in a monolingual environment (12, F2 +1; F1 +4; F3 +3). However, learning additional languages is beneficial, as this improves one's knowledge of one's other language(s) (25, +3). Additionally, all languages are equally important (23, -3), and dialects may also be considered part of one's multilingual repertoire (06, -1). As stated by participant 47, "all languages have equal value, regardless of Mandarin, Spanish and English being the most spoken languages, because we need to be able to communicate with others" (Participant 47, Primary).

Finally, although monolingualism is not predominant in our society (15, -3), the learning of additional languages is not particularly valued (11, -1), as clearly expressed by participant 51: "in England, this is not the case. In fact, as a trainee teacher I am shocked at how little attention MFL [Modern Foreign Languages] receives" (Participant 51, Modern Languages). For these future teachers, in English schools as in society, multilinguals are not entirely an exception (19, 0); schools are aware of this and pay due attention to students' multilingualism (20, -2), so that multilingual students are not ashamed to use their first language(s) in school (22, -2). This is important, as multilingual students greatly benefit from using their first languages both at home (17, +3) and in school, as being able to use one's full linguistic repertoire is essential for the personal development of a multilingual child (28, +4).

Interpreting Factor F3

Factor F3 had an eigenvalue of 2.898 and explained 16% of the study variance. Seven participants were significantly and uniquely associated with this factor, while six additional Q sorts were confounded. Six participants identified as female and one as male; their mean age was 27.57 (*Mdn* = 23). Five of the seven participants were training to become primary teachers, whilst the other two were training to teach Chemistry and Physics in secondary schools.

Pre-service teachers aligning with factor F3 decisively oppose the idea that everyone is multilingual (16, -3), as being multilingual implies communicative competence in multiple languages (29, +2). It is however possible to become multilingual through language learning (12, +3). These points are clearly summarised by participant 6: "multilingualism is more than simply being able to communicate, I think it implies fluency in two or more languages", so that "everyone is not multilingual, most (if not all) may have the capacity to learn multiple languages but until they do they cannot be considered multilingual" (Participant 6, Sciences –

Physics). Finally, future teachers aligning with F3 are not sure whether dialects contribute to one's multilingual repertoire (06, 0) or if languages are separate entities in the multilingual mind (27, 0).

Pre-service teachers aligning with F3 most strongly view their society as predominantly monolingual (15, +4). Perhaps because of this, they believe that learning languages is not particularly important in their society (11, -1), as also stated by participant 14: "I certainly feel that our society is predominantly monolingual, and therefore that it confers few advantages directly onto individuals for speaking languages other than English" (Participant 14, Sciences – Physics). Accordingly, these future teachers strongly believe that multilingual students are an exception in English schools (19, +3). Even if by no means does multilingualism represent a threat to national languages and cultures (18, -4), not all languages are equally important (23, +1), and although multilingual students benefit from using their first language(s) at home (17, +1), giving them opportunities to use their full linguistic repertoire is not essential for their personal development (28, -2). This belief is reflected in participant 6's explanation:

> A multilingual student can fully develop through opportunities in one language like any other monolingual person. They may feel an intrinsic desire or need to do things with their other language but where this exists they can seek out those opportunities themselves (Participant 6, Sciences – Physics).

Findings: Pre-Service Teachers' Beliefs after the Intervention

Participant Characteristics, Data Collection and Analytical Procedure

Nineteen participants took part in the intervention between January and May 2021, after which 16 of them completed a second Q sort, using the same Q sample and condition of instruction. Of these participants, four were pre-service primary-school teachers and 12 pre-service secondary-school teachers. Of the latter group, six taught a STEM subject, five an Arts-and-Humanities subject and one participant taught Modern Languages. Twelve participants identified as female and four as male. The group's age ranged from 21 to 52, $M = 27$ and SD = 8.3. All the participants' pre-intervention Q sorts significantly loaded at least one of the three baseline factors. Four participants uniquely loaded on factor Pre-F1, with three additional confounded Q sorts; two participants uniquely loaded on factor Pre-F2, with two additional confounded Q sorts; and three participants uniquely loaded on Pre-F3, with two additional confounded Q sorts.

The pretest-posttest Q sorts were compared using a multi-method analytical approach detailed in Morea (2022). Specifically, three analyses were conducted. The first analysis tested whether participants' factor loadings to each baseline factor changed significantly after the intervention at the group level. For the second analysis, each participant was associated with a baseline factor based on their strongest factor loading before and after the intervention; then, a test was conducted to assess whether participants' distribution across the baseline factors (i.e., the proportion of participants most strongly loading on each baseline factor) had statistically changed between time points. Thirdly, a second Q method analysis was conducted using the posttest Q sorts only, and the emerging factors were compared with the baseline factors to assess the evolution of the baseline factors over time. By using different analytical approaches, the development of teacher beliefs can be investigated under different lenses. Whilst the first two analyses use the pre-intervention belief profiles as a baseline to examine changes in participants' Q sorts after the intervention, the third approach allows us to examine the stability of the baseline factors over time.

Method 1: Pretest-Posttest Comparison of Participants' Factor Loadings on the Baseline Factors

A series of Wilcoxon signed-rank tests was conducted to statistically compare participants' factor loadings on each of the three initial factors. A non-parametric test was preferred due to the small sample size (n = 16) and the fact that most variables were not normally distributed. The results of the Wilcoxon signed-rank tests for each baseline factor are reported in Table 2. The test revealed statistically significant increases in participants' factor loadings on both factor Pre-F1 and Pre-F2 after the intervention, with medium effect sizes, but not on factor Pre-F3.

Table 2. Comparison of participants' average factor loadings on the baseline factors, before and after the intervention.

Factor	**Mean score**			**Test statistics**		
	Pre-intervention	**Post-intervention**	**Difference**	***Z***	***p***	***r***
Pre-F1	.429	.553	+0.124	-1.966	.049*	-.348
Pre-F2	.304	.433	+0.129	-2.122	.034*	-.375

Pre-F3	.366	.386	+0.02	-0.44	.660	-.078

Note: $^{*}p < .05$

These findings indicate that, after the intervention, participants tended to align more strongly with the baseline factors Pre-F1 and Pre-F2, whereas no noticeable difference was found in relation to Pre-F3. It is important to note that a stronger mean factor loading on two of the three baseline factors does not necessarily imply a decrease in mean factor loadings on the third factor. Given that the baseline factors were moderately intercorrelated, it is possible that the slight mean increase in the Pre-F3 factor loadings was a secondary effect of the much stronger increase in mean factor loadings on the factors Pre-F1 and Pre-F2.

Method 2: Pretest-Posttest Comparison of Participant Distribution by Highest Factor Loading on the Baseline Factors

To statistically compare the distribution of participants by their alignment with the baseline factors before and after the intervention, a Bhapkar's test of marginal homogeneity was conducted (Bhapkar, 1966). This test is an extension of the McNemar's test, enabling to statistically compare the distribution of a sample by a categorical variable made of three or more categories between two time points. The test generates a chi-squared statistic and a p-value that can be used to assess whether any distributional difference is statistically significant. The Bhapkar's test is an omnibus test which assesses the presence of overall changes in distribution across three or more categories; therefore, in case of a significant result, post-hoc tests need to be conducted to examine within which specific category a significant change in distribution has occurred. Since this test is not available on the software SPSS (version 28), the software developed by Uebersax (2006), which was specifically created to run this test, was used to conduct the analysis.

Table 3 shows the distribution of participants on the three factors before (rows) and after (columns) the intervention, which is also graphically displayed in Figure 1. As shown in Figure 1, eleven participants loaded most strongly on factor Pre-F1 after the intervention compared to seven before the intervention; three of the four participants who most strongly loaded on Pre-F1 after the intervention used to align with factor Pre-F3 before the intervention, whilst the other participant used to align with factor Pre-F2. Only one participant remained aligned with factor Pre-F3 after the intervention; on the contrary, all participants initially loading on Pre-F1 remained on the same factor. A Bhapkar's test revealed that this overall

change in the distribution of participants by their highest factor loadings after the intervention was statistically significant, $\chi^2(2, n = 16) = 6.4$, $p = .041$.

Table 3. Distribution of participants by highest significant factor loadings on pre-F1, pre-F2 and pre-F3, before and after the intervention.

		After intervention			
		Pre-F1	**Pre-F2**	**Pre-F3**	**Total**
Before intervention	Pre-F1	7	0	0	7
	Pre-F2	1	3	0	4
	Pre-F3	3	1	1	5
	Total	11	4	1	16

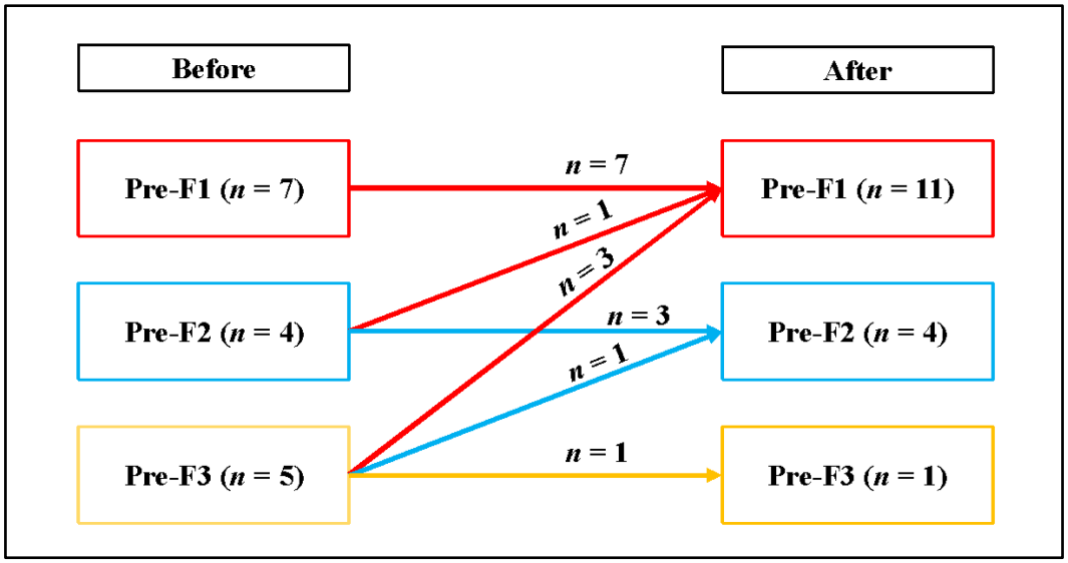

Figure 1. Distribution of participants by highest factor loadings, before and after the intervention.

A series of McNemar's post-hoc tests was conducted to assess within which specific factor the distribution changed significantly. A Bonferroni adjustment was applied when interpreting the p-values as to account for the multiple comparisons; after the adjustment, the threshold for statistically significant results was raised to $p = .017$. As shown in Table 4, the McNemar's post-hoc tests with a Bonferroni adjustment revealed no statistically significant differences in the distribution of participants within any specific factor. This mismatch between

the omnibus and post-hoc tests is not unusual (see Chen et al., 2018, for a discussion on the topic), and possible explanations include a lack of statistical power due to small sample size, an overall effect that is not sufficiently strong, or the conservative nature of the Bonferroni test for multiple comparisons.

Table 4. McNemar's post-hoc test statistics.

Factor	χ^2	***Df***	***p***
Pre-F1	4	1	.046
Pre-F2	0	1	1
Pre-F3	4	1	.046

Note. None of the p-values fall below the Bonferroni-adjusted significance level of p = .017.

Method 3: Q Method Analysis of Posttest Q sorts and Pretest-Posttest Comparison of the Extracted Factors

To explore which configurations of beliefs participants held after the intervention, and to compare them with the baseline factors, a second Q method analysis was conducted on the 16 post-intervention Q sorts. For factor extraction, both a two and a three-factor solution were considered. It was decided that a two-factor solution was more parsimonious, as both solutions explained all the Q sorts, with a minimal difference in terms of confounded Q sorts (seven in the two-factor solution and six in the three-factor solution). The factor solution explained 56% of the study variance.

The two newly extracted factors were compared with the baseline factors by correlating their factor arrays. Table 5 reports the correlations between the baseline and the post-intervention factors. The correlation coefficients indicate that the two factors emerging after the intervention were both most closely aligned with the original first factor (Pre-F1), and the moderately strong correlations with the other two baseline factors may be due to the intercorrelations between the initial three factors.

Table 5. Correlations between pretest and posttest factors.

	Post-F1	**Post-F2**
Pre-F1	.733**	.800**

Pre-F2	.560**	.606**
Pre-F3	.446*	.560**

Note. $^{*}p < .05$; $^{**}p < .01$.

Interpreting Factor Post-F1

Factor Post-F1 had an eigenvalue of 7.109 and explained 30% of the sample variance; four participants uniquely loaded on this factor and six additional participants were confounded. Despite the high correlations between Post-F1 and Pre-F1, some marked differences exist between the two belief profiles. If factor Pre-F1 is characterised by a less traditional view of multilingualism, slightly opposing the association of multilingualism with fluency in three or more languages (29, -1), factor Post-F1 more strongly rejects this view (29, -2). Furthermore, this is the only profile expressing agreement with the idea that everyone is multilingual (16, +2). Whilst profile Pre-F1, despite this view of multilingualism, tends to consider society as predominantly monolingual (15, +1), profile Post-F1 most strongly disagrees with this view (15, -4). However, compared to factor Pre-F1, pre-service teachers loading on Post-F1 tend to be neutral towards the idea that English society values learning additional languages (11, Post-F1, 0; Pre-F1, +2) and that all languages are equally important (23, Post-F1, 0; Pre-F1, +4). Perhaps as a result of this encompassing view of multilingualism, pre-service teachers aligning with factor Post-F1 tend to place less emphasis on the benefits and features that distinguish multilinguals from monolinguals. Whilst most strongly agreeing with the idea that multilingualism provides cognitive advantages (04, +4), future teachers loading on Post-F1 do not particularly believe that multilinguals are more open towards other cultures and languages (05, Post-F1, 0; Pre-F1, +3) or have a more expanded vocabulary (10, Pre-F1, +1; Post-F1, -1). Finally, pre-service teachers aligning with this profile strongly disagree with the view that knowing several languages provides more opportunities for professional success (08, Post-F1, -3; Pre-F1, +3).

Interpreting Factor Post-F2.

Factor Post-F2 had an eigenvalue of 1.984 and explained 27% of the sample variance; five participants loaded uniquely on this factor and one participant was confounded. Factor Post-F2 is almost indistinguishable from Pre-F1. The only marked difference is that Post-F2 has partly inherited the more traditional view of multilingualism that characterised factors Pre-F2 and Pre-F3: although future teachers aligning with Post-F2 also reject the definition of a

multilingual person as someone who can communicate in more than two languages (29, -3), they most strongly disagree with the idea that everyone is multilingual (16, -4), and firmly believe that knowing a dialect does not make someone multilingual (06, +3). These are the only noticeable differences between profiles Post-F1 and Pre-F1, and the remaining statements are in the same or in a very similar position across the two factor arrays. Additionally, in line with Pre-F1 but in contrast with Post-F1, these future teachers most strongly reject the idea that some languages are more important than others (23, Post-F2, -4; Post-F1, 0).

Discussion and conclusion

Research exploring teachers' beliefs about multilingualism through questionnaires has shown that teachers across national contexts tend to express positive views of multilingualism. By using Q methodology, this study suggests that teachers' beliefs about multilingualism may, in fact, be more heterogeneous and nuanced. Through their Q sorts, 51 pre-service teachers expressed three configurations of beliefs characterised by differences in whom these pre-service teachers ascribed as multilingual, in their perception of the value of knowing other languages in society, and in how widespread multilingualism is in England. This finding echoes Lundberg's results in the Swedish context (2019a), who also found differences in teachers' perceptions of whether communicating in several languages represents a pre-condition to consider someone as multilingual. In particular, trainee teachers aligning with belief profile (pre-)F3 tended to hold a hierarchical view of languages, whilst considering multilingualism as a rare occurrence in schools and society. This belief configuration thus seems particularly problematic if we consider that those future teachers will work in linguistically diverse contexts, as the combined beliefs that being multilingual implies communicative ability in several languages and that multilingualism is the exception in schools suggest that these teachers might struggle to recognise and value the linguistic diversity of their students. Taking an identity perspective, it can be hypothesised from these findings that these pre-service teachers may have limited awareness of their own multilingual repertoire and be more likely to embrace a monolingual identity, whereby they see themselves as monolingual and consider monolingualism as the norm. As a result, these teachers may (implicitly or explicitly) enforce monolingual language policies in the classroom that do not reflect the multilingual nature of their classes. The study findings have thus implications for ITET providers, which should be aware of the diversity of beliefs and language backgrounds among student teachers and include multilingualism as part of their training.

To test the potential benefits of adding such training within teacher education, a sub-group of 16 pre-service teachers participated in a self-paced, online intervention aimed at raising participants' awareness of multilingualism, after which they produced a second Q sort. A multi-method analytical comparison of Q sorts between time points revealed that, after the intervention, more pre-service teachers considered multilingualism as the norm in schools and society. This is indicated by the significant increase in mean factor loadings on factors Pre-F1 and Pre-F2 after the intervention, and in the fact that, of the five participants who most strongly aligned with profile Pre-F3, only one remained associated with it at time two. This trend was confirmed by a second Q method analysis of the posttest Q sorts, which confirmed the disappearance of profile Pre-F3. An examination of the new factors revealed that participants remained divided over the meaning and implications of being multilingual. For example, whilst participants aligning with profile Post-F1 tended to believe that everyone is multilingual, participants aligning with profile Post-F2 strongly rejected this view. It must, however, be stressed that these changes in participants' beliefs were manifested soon after the conclusion of the intervention, and this study cannot thus provide indications on the stability of these belief profiles. Nonetheless, the study findings suggest that embedding explicit training on multilingualism within teacher education may represent an effective way to encourage pre-service teachers to embrace a more open and all-encompassing view of multilingualism, which in turn can increase future teachers' confidence and readiness to effectively teach in today's multilingual classrooms.

With multilingualism representing the norm in primary and secondary schools in England, raising future teachers' awareness and understanding of multilingualism during ITET seems a crucial step toward training linguistically responsive teachers. It is therefore particular important that ITET providers are aware of and responsive to the fact that trainee teachers may enter teacher education with monolingual ideologies and beliefs about multilingualism that do not reflect the school and classroom realities (Vikøy & Haukås, 2021). In this regard, the research findings suggest that current provision on inclusive teaching, typically focused on developing teaching strategies for students with EAL, may be enhanced by integrating a multilingual and identity-oriented element. If future teachers need to become confident professionals able to effectively work in linguistically diverse environments, it is crucial that, as part of teacher education, they are provided with opportunities to enhance their understanding of multilingualism and to consider how this relates to their own language experience and identity.

Although this study has produced some evidence on the potential benefits of such provision, more empirical research is required to confirm the research findings. In this regard, Q methodology represents a suitable methodological approach not only to reveal shared configurations of beliefs cross-sectionally, but to also track their development over time. By providing an analytical framework to uncover the complex interconnections of individual beliefs and compare distinct belief configurations held by groups of like-minded teachers, Q can overcome the limitations of traditional quantitative instruments when researching teacher beliefs. In particular, the proposed analytical approach, by integrating statistical tests of longitudinal analysis with the traditional Q-method analysis, can provide both an in-depth qualitative comparison of belief profiles between time points and a within-group statistical assessment of change over time at the group level.

References

Alisaari, J., Heikkola, L. M., Commins, N. & Acquah, E. O. (2019). Monolingual ideologies confronting multilingual realities. Finnish teachers' beliefs about linguistic diversity. *Teaching and Teacher Education, 80,* 48–58. https://doi.org/10.1016/j.tate.2019.01.003

Banasick, S. (2019). KADE: A desktop application for Q methodology. *Journal of Open Source Software, 4*(36), 13-60. https://doi.org/10.21105/joss.01360

Bhapkar, V. P. (1966). A note on the equivalence of two test criteria for hypotheses in categorical data. *Journal of the American Statistical Association, 61*, 228-235.

Borg, S. (2011). The impact of in-service teacher education on language teachers' beliefs. *System, 39*(3), 370-380. https://doi.org/10.1016/j.system.2011.07.009

Borg, S. (2016, 25 April). Do teachers' beliefs really matter? *Simon Borg.* http://simon-borg.co.uk/do-teachers-beliefs-really-matter/

Borg, S. & Alshumaimeri, Y. (2019). Language learner autonomy in a tertiary context: Teachers' beliefs and practices. *Language Teaching Research, 23*(1), 9-38. https://doi.org/10.1177/1362168817725759

Calafato, R. (2020). Language teacher multilingualism in Norway and Russia: Identity and beliefs. *European Journal of Education, 55*(4), 602-617. https://doi.org/10.1111/ejed.12418

Camenzuli, R., Lundberg, A. & Gauci, P. (2023). Collective teachers' beliefs about multilingualism in Maltese primary education. *International Journal of Bilingual*

Education and Bilingualism, 26(4), 379-394. https://doi.org/10.1080/13670050.2022.2114787

Chen, T., Xu, M., Tu, J., Wang, H. & Niu, X. (2018). Relationship between Omnibus and Post-hoc Tests: An Investigation of performance of the F test in ANOVA. *Shanghai Archives of Psychiatry*, *30*(1), 60–64. https://doi.org/10.11919/j.issn.1002-0829.218014

De Angelis, G. (2011). Teachers' beliefs about the role of prior language knowledge in learning and how these influence teaching practices. *International Journal of Multilingualism*, *8*(3), 216–234. https://doi.org/10.1080/14790718.2011.560669

Department for Education (2022). Schools, pupils and their characteristics: England 2021. https://explore-education-statistics.service.gov.uk/find-statistics/school-pupils-and-their-characteristics

Evans, M., Schneider, C., Arnot, M., Fisher, L., Forbes, K., Liu, Y. & Welply, O. (2020). *Language development and social integration of students with english as an additional language* (1st ed.). Cambridge University Press. https://doi.org/10.1017/9781108656047

Fischer, N. & Lahmann, C. (2020) Pre-service teachers' beliefs about multilingualism in school: An evaluation of a course concept for introducing linguistically responsive teaching. *Language Awareness*, *29*(2), 114-133. https://doi.org/10.1080/09658416.2020.1737706

Fisher, L., Evans, M., Forbes, K., Gayton, A. & Liu, Y. (2020). Participative multilingual identity construction in the languages classroom: A multi-theoretical conceptualisation. *International Journal of Multilingualism, 17*(4), 448-466. https://doi.org/10.1080/14790718.2018.1524896

Foley, Y., Anderson, C., Conteh, J. & Hancock, J. (2018). *Initial teacher education and English as an additional language*. https://www.ceres.education.ed.ac.uk/wp-content/uploads/2020/08/ITE-Report.pdf

Gorter, D., & Arocena, E. (2020). Teachers' beliefs about multilingualism in a course on translanguaging. *System*, *92*, https://doi.org/10.1016/j.system.2020.102272

Griva, E., & Chostelidou, D. (2012). Multilingual competence development in the Greek educational system: FL teachers' beliefs and attitudes. *International Journal of Multilingualism*, *9*(3), 257-271. https://doi.org/10.1080/14790718.2011.626857

Haukås, A. (2016). Teachers' beliefs about multilingualism and a multilingual pedagogical approach. *International Journal of Multilingualism*, *13*(1), 1-18. https://doi.org/10.1080/14790718.2015.1041960

Liu, Y., & Evans, M. (2016) Multilingualism as legitimate shared repertoires in school communities of practice: Students' and teachers' discursive constructions of languages in two schools in England. *Cambridge Journal of Education*, *46*(4), 553-568, https://doi.org/10.1080/0305764X.2015.1091441

Liu, Y., Fisher, L., Forbes, K. & Evans, M. (2017) The knowledge base of teaching in linguistically diverse contexts: 10 grounded principles of multilingual classroom pedagogy for EAL. *Language and Intercultural Communication*, 17(4), 378-395, https://doi.org/10.1080/14708477.2017.1368136

Llompart, J., & Birello, M. (2020). Migrant and non-migrant origin pre-service teachers' beliefs about multilingualism and teaching in multilingual classrooms: Convergences and divergences. *Sustainable Multilingualism*, *17*(1), 102-123. https://doi.org/10.2478/sm-2020-0015

Lucas, T., & Villegas, A. M. (2013). Preparing linguistically responsive teachers: Laying the foundation in preservice teacher education. *Theory into Practice*, *52*(2), 98–109. https://doi.org/10.1080/00405841.2013.770327

Lundberg, A. (2019a). Teachers' beliefs about multilingualism: Findings from Q method research. *Current Issues in Language Planning*, *20*(3), 266–283. https://doi.org/10.1080/14664208.2018.1495373

Lundberg, A. (2019b). Teachers' viewpoints about an educational reform concerning multilingualism in German-speaking Switzerland. *Learning and Instruction*, *64*. https://doi.org/10.1016/j.learninstruc.2019.101244

Lundberg, A., de Leeuw, R., & Aliani, R. (2020). Using Q methodology: sorting out subjectivity in educational research. *Educational Research Review*, 31. https://doi.org/10.1016/j.edurev.2020.10036

Morea, N. (2022). Investigating change in subjectivity: The analysis of Q-sorts in longitudinal research. *Research Methods in Applied Linguistics* *1*(3). https://doi.org/10.1016/j.rmal.2022.100025

Portolés, L., & Martí, O. (2020). Teachers' beliefs about multilingual pedagogies and the role of initial training. *International Journal of Multilingualism*, *17*(2), 248-264. https://doi.org/10.1080/14790718.2018.1515206

Schroedler, T., & Fischer, N. (2020). The role of beliefs in teacher professionalisation for multilingual classroom settings. *European Journal of Applied Linguistics*, *8*(1), 49–72. https://doi.org/10.1515/eujal-2019-0040

Uebersax, J. S. (2006). User guide for the MH program (vers. 1.2). Tests of marginal homogeneity for two-way tables. http://john-uebersax.com/stat/mh.htm

Vikøy, A., & Haukås, Å. (2021). Norwegian L1 teachers' beliefs about a multilingual approach in increasingly diverse classrooms. *International Journal of Multilingualism*. https://doi.org/10.1080/14790718.2021.1961779

Watts, S., & Stenner, P. (2005). Doing Q methodology: Theory, method and interpretation. *Qualitative Research in Psychology*, *2*(1), 67-91, https://doi.org/10.1191/1478088705qp022oa

Watts, S., & Stenner, P. (2012). *Doing Q methodological research: Theory, method and interpretation.* SAGE.

Woll, N. (2020). Towards crosslinguistic pedagogy: Demystifying pre-service teachers' beliefs regarding the target-language-only rule. *System, 92*, https://doi.org/10.1016/j.system.2020.102275

Chapter 6

Pre-service language teachers' beliefs about plurilingualism: Evidence from a Q study in a crosslinguistic teacher education curriculum

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Introduction

Switzerland is characterised by a complex sociolinguistic landscape, which involves four national languages (including regional varieties), several states (cantons) with more than one official language, a wealth of immigrant home languages, and relatively high-profile language acquisition planning in obligatory schooling, with at least two foreign languages, most often a second national language and English, starting in primary school. This arguably places considerable demands on the educational system, and especially on teachers and teacher education. Language teachers should take joint responsibility for coherently promoting learners' plurilingual repertoires (Beacco et al., 2016). At the same time, the tendency of language teacher education to focus on isolated target languages, which could be seen to work against the expectation of language teachers to work across languages in a multi- and plurilingual perspective in the classroom, has often been commented on (e.g. Meißner & Reinfried, 1998; Ziegler, 2013; Issler, 2016).

For about 20 years, educational institutions in Switzerland have responded to these demands with various innovative educational models, including the introduction of crosslinguistic components into teacher education, in order to foster pre-service teachers' development of plurilingual competences. A case in point is a novel cross linguistic teacher education curriculum for language teachers that was introduced for pre-service teachers of lower secondary level at St. Gallen University of Teacher Education (PHSG) in 2017 (Bleichenbacher et al., 2019a). Within this curriculum, many modules are given a plurilingual orientation, and a large part of them involve teaching and learning in more than one language. More specifically, a range of the pre-service teachers' target languages are used both

receptively and productively for communication (Bleichenbacher et al., 2023). A key aim of the curriculum is to enhance the exposure to and awareness of languages that may not necessarily be part of pre-service teachers' repertoire. They are expected to activate various plurilingual strategies themselves and to develop professional competences in the domain of plurilingual education. These competences are seen as a dynamic interplay of aspects of professional knowledge, motivational orientations, self-regulatory skills, and beliefs (e.g. Manno, 2022).

In this study, we will first present the particular features that are specific to the cross linguistic curriculum at the PHSG and then present and reflect on the research method and the first findings.

Theoretical background

Teacher competences are a complex field. They consist of numerous dimensions, and teachers' beliefs and values are considered a relevant component (cf. Baumert & Kunter, 2006; Bleichenbacher et al., 2019b; Shulman, 1986)[14].

To focus on the beliefs of pre-service language teachers about plurilingualism and plurilingual education, several basic concepts first need to be clarified. By itself, the term plurilingualism is extremely multifaceted (Hufeisen, 2010; Meißner, 2004) and must be "considered and researched from different angles" (Allgäuer-Hackl & Jessner, 2014, p. 126). In this paper, we understand plurilingualism as the ability of a speaker to use more than one language (Beacco et al., 2016), which typically involves intercultural competences (Beacco & Byram, 2007). We distinguish between multilingualism and plurilingualism according to the *Common European Framework of Reference for Languages* (CEFR) (Council of Europe, 2001) and its *Companion Volume* (Council of Europe, 2020). While multilingualism refers to the coexistence of several languages within the same social group or territory, plurilingualism refers to each learner's individual linguistic repertoire, as well as his/her experience of languages and language learning.

Furthermore, the terms plurilingualism and plurilingual competence are based on the idea that languages and linguistic varieties are interconnected and interact with each other in the mental system (cf. Council of Europe, 2001, 2020; Hu, 2017; Wiater 2006). In this way,

[14] See also the following ongoing project (2020-2023): Developing teacher competences for pluralistic approaches. Strasbourg/Graz: European Centre for Modern Languages. https://www.ecml.at/ECML-Programme/Programme2020-2023/Developingteachercompetencesforpluralisticapproaches/tabid/4300/language/en-GB/Default.aspx

the learner should create interlingual connections from the totality of their linguistic repertoire. In the Swiss context, the term functional plurilingualism is often used (e.g. Hutterli, 2012), as it is conceptually very much in line with the policy goal of enabling learners with the necessary competences in at least two languages in addition to the local language as the language of schooling (D-EDK, 2016).

By plurilingual education we understand crosslinguistic approaches for the development of plurilingualism and plurilingual competence. These can be subsumed under the generic concept of "pluralistic approaches to languages and cultures". Pluralistic approaches refer to "didactic approaches that use teaching/learning activities involving several varieties of languages and cultures" (Candelier et al., 2012). These include the intercultural approach, awakening to languages (introducing learners to linguistic and cultural diversity and developing language awareness through exposure to, and comparison of different varieties and languages), intercomprehension (applying comprehension strategies mainly rooted in linguistic similarities to engage with unknown languages related to languages one already knows and focusing systematically on the development of receptive skills), and the integrated language approach, which helps learners to establish links between a limited number of languages and involves exploiting, in a fairly intensive and systematic way, different kinds of relations between languages in one's repertoire (e.g. the language of schooling, the first and the second foreign language) for the development of communicative competences and language learning strategies in all languages learnt.

In the research field of professional language teacher competences, there is a broad consensus that innovative approaches – which currently include the plurilingual education[15]– are not always accepted by pre-service teachers because they challenge their organisational knowledge and their beliefs, which are often informed by monolingual discourses (Portolés & Marti, 2020; Vetter, 2013). School practice is also shaped by teachers' beliefs (Nelson & Guerra, 2014). Beliefs are considered quite stable and difficult to change (Blömeke, 2008; Baumert & Kunter, 2006).

Despite the formulation of competences in the foreign language curricula, which is based on the *Common European Framework of Reference* (CEFR*)* (Council of Europe, 2001) and the competences and resources listed in the *Framework of Reference for Pluralistic Approaches to Languages and Cultures* (FREPA) (Candelier et al., 2012), teachers' beliefs and

[15] Plurilingual education and pluralistic approaches potentially cover the same teaching/learning procedures. Pluralistic approaches are one possible way of conceiving plurilingual education (Candelier et al., 2012).

language teaching still tend to be oriented towards monolingualism (Gogolin, 1994). One reason for this gap may lie in prospective teachers' beliefs about multi- and plurilingualism, and one possible approach is to capture their acceptance of plurilingualism through their beliefs in undergraduate education.

So far, there is only a limited amount of research on teachers' beliefs about plurilingual approaches in foreign language teaching, although this aspect is considered an important part of foreign language research (Caspari, 2014) but still neglected aspects of foreign language teaching as a discipline. However, researching teachers' beliefs is considered difficult because teachers' various beliefs and their interrelationships are not directly observable and may not be fully conscious and accessible (Rokeach, 1972).

Methodology

To identify the complexity of pre-service teachers' beliefs about plurilingualism, Q methodology (henceforth Q) was chosen as a fruitful approach. Q allows the researchers to locate shared viewpoints of beliefs in an exploratory and theory-generating way by respecting individuals' own priorities, values, beliefs, and opinions (Ernest, 2011). It has been shown that Q is a reliable method (Watts & Stenner, 2012), despite methodological debates on the appropriate statistical techniques used (Akhtar-Danesh, 2016). In the following we are going to outline the research process of our study based on the stages and elements for reporting as proposed in the introduction of this volume (see figure 3). The potential of Q will be used in the present project for visualising the beliefs of pre-service teachers who are attending cross linguistic courses at PHSG. The aim of Q methodology in this study is thus to describe types of shared views on plurilingualism.

Research setting and participants

The research setting is an initial teacher education program for lower secondary level at St. Gallen University of Teacher Education (PHSG). The program consists of a 4.5-year Masters program, where teachers choose a language or science profile and typically specialise in four subjects, with either German (the language of schooling) or mathematics as a major. Students in the language profile typically study one or more foreign languages as well as German, while science students usually choose one foreign language or none. The choice of foreign language subjects includes English, French and Italian. In most schools across Eastern Switzerland, English is learned as the first foreign language, French as a second and Italian as an optional third; accordingly, most students coming to PHSG are functional in English and French. An

important exception is the trilingual canton of Grisons, for whose German and Romansh-speaking territories the university also caters. In these territories, the obligatory foreign languages are Italian and English, while French is optional. In Swiss teacher education institutions in general, a complex pattern of options for pre-service teachers has resulted in a situation where the majority of students choose to study one foreign language rather than two, and much like elsewhere in Europe, the students' numbers for English are higher than for other languages.

In 2013, a group of lecturers and researchers at PHSG seized the opportunity of an imminent curricular reform to redesign the foreign language curricula, in an attempt to align teacher education more closely with the aims of plurilingual education. The reform had two main aims, namely, to facilitate the choice of national foreign languages (French and/or Italian), and to enhance pluralistic approaches in crosslinguistic courses that are obligatory for all future language teachers. The most substantial change of this curricular reform was the replacement of approximately 50% of university courses in one foreign language subject with cross linguistic courses where students of all three target languages are mixed. The curriculum is informed by a theoretical concept published in German (Bleichenbacher et al. 2019a), and based on the pluralistic approaches to languages and cultures, and objectives of plurilingual and pluricultural teaching, outlined in the FREPA (Candelier et al., 2012; for the Swiss context see also Sauer & Saudan, 2008). The pluralistic approaches inform, albeit to different degrees, the various subdisciplines in the curriculum, which include subject knowledge, subject methodology, language competence development, teaching practice, and the obligatory 12 week stay in a region or country where the target language is spoken. All pre-service teachers complete the crosslinguistic courses, plus the language-specific courses for one or more language(s) as exemplified in Table 1, which shows a simplified overview of the curriculum.

Table 1. An overview of the plurilingual curricula.

Crosslinguistic
Crosslinguistic culture studies and linguistics *4 courses, 96 contact hours*
Plurilingual methodology *4 courses, 84 contact hours*
Language-specific

English	French	Italian
English Studies (cultures, literatures, linguistics) *4 courses, 96 contact hours*	French Studies (cultures, literatures, linguistics) *4 courses, 96 contact hours*	Italian Studies (cultures, literatures, linguistics) *4 courses, 96 contact hours*
English as a foreign language teaching methodology *2 courses, 48 contact hours*	French as a foreign language teaching methodology *2 courses, 48 contact hours*	Italian as a foreign language teaching methodology *2 courses, 48 contact hours*
English language competence *1 course, 12 contact hours*	French language competence *1 course, 12 contact hours*	Italian language competence *1 course,12 contact hours*

As shown in table 1, the curriculum contains both language-specific (taught in the target language) and crosslinguistic courses in all main areas (subject discipline, subject methodology and language competence). Pre-service teachers are introduced to key aspects of crosslinguistic and plurilingual methodology in a variety of sub-disciplines. In linguistics and culture studies, they familiarise with plurilingual and intercultural phenomena. The modules in foreign language methodology are characterised by an emphasis on pluralistic teaching and learning, such as intercomprehension or intercultural communication.

A research project created to survey the implementation of the curriculum, *Plurilinguale Ausbildung von Lehrpersonen (Plurilingual Teacher Education)*, has documented several positive outcomes, but also identified some problem areas. Students still most frequently choose English only (ca. 50–60% of all students). The numbers for French (most often in combination with English) are stable, though (ca. 20–30%), and Italian was successfully reintroduced in the curriculum. The overall commitment of lecturers to teach across subject and language boundaries is high, and so is most students' willingness to engage with multilingual courses and plurilingual methodology. At the same time, both lecturers and pre-service teachers have described a number of difficulties, especially regarding students' and lecturers' language competences. In order to more fully engage with these debates, the project team decided to complement and enrich the insights gained from previous exploratory studies

with more detailed insights on pre-service teachers' beliefs in a crosslinguistic curriculum, using the Q methodology.[16]

Research design and procedure

Concourse development and Q sample construction

The question "What does plurilingualism mean to me?" was used as the condition of instruction for capturing different viewpoints on plurilingualism from an individual perspective. The development of the concourse was based on Lundberg's (2019a, 2019b) Q statements[17], which were adapted to this study's context of crosslinguistic and plurilingual teacher education and supplemented with additional items by the research team, considering oral and written sources from pre-service teachers' everyday contexts.

The concourse was grouped according to thematic aspects (resources, cognition, emotion, communication, interculturality, identity, general values) to ensure a balanced consideration of different aspects of plurilingualism. Subsequently, feedback was obtained from experts in plurilingualism on the complexity, clarity, scope, and fit of the items. Based on this feedback, items were adapted, additional items were added, and finally the Q sample consisting of 31 items was formed.

Study participants

The study participants are pre-service teachers in the second, fourth, sixth and eighth semester who have chosen at least one foreign language and therefore attended plurilingual training

[16] The study presented in this contribution will be supplemented and continued by the ongoing dissertation project of Christof Chesini, which records the beliefs about plurilingualism of students from two different teacher universities in Switzerland, with and without crosslinguistic courses respectively. The project is expected to contribute to answering the question of the impact of the crosslinguistic curriculum.

[17] The items correspond to Lundberg's component *understanding* "aimed to reveal the teachers' underlying understanding of and belief about central concepts in linguistically diverse school settings" (Lundberg 2019a, p. 3). Lundberg uses the term multilingualism to describe its social and individual components (Lundberg, 2020, pp. 36-43). In this paper the term plurilingualism is used for individual multilingualism. For this reason, the following adjustments were made in the items, for example: "Multilingualism can be frustrating" (Lundberg, 2020, p. 154) to "Plurilingualism is frustrating" (item 21). Further adjustments were made in the area of terminology so that we could ensure that the pre-service language teachers understood the items, e.g. "Multilingualism is a resource for learning a new language" (Lundberg, 2020, p. 154) to "Plurilingualism is beneficial for learning other languages.

content. They were approached to participate in the study in April 2022. A total of 73 students completed the Q sort (response rate 40%). 79.5% of them are female, their average age is 22.5 years. 82.2% of them are pursuing a linguistic specialisation, while 17.8% are pursuing a science specialisation. 30.1% have grown up with more than one first language, while 69.9% have only German or Swiss German as their first language.

Data collection

Prior to data collection, a pilot survey was conducted with personnel of our department to obtain indications of the time required to complete the survey, problems or uncertainties regarding the survey software, as well as logic and user-friendliness. Based on the feedback, instructions for completing the survey were optimised. The Q sorting was then conducted online from April to mid-May 2022 using *Q Method Software* (Lutfallah & Buchanan, 2019). The study participants were informed by the research team that participation in the study was voluntary, then received an email with a personal access link to the survey, which included the following elements:

1. Information about the content of the survey and data usage
2. Declaration of consent
3. Pre-sorting activity (disagree, neutral, agree)
4. Sorting activity (forced choice with pyramid quasi-normal distribution from -5 for "I disagree" to +5 "I agree")
5. Questionnaire with demographic information (gender, age, first languages, field of study, current semester, teaching experience, completion of semester abroad or language stay, self-assessment of foreign language competence)

Data analysis

In Q methodology a factor analytic procedure based on a by-person correlation matrix is used to identify similar overall configurations of the sorted items by different people or, in the words of Brown (1993), to determine empirically, "how many basically different Q sorts are in evidence" sharing a high "family resemblance". For this purpose, the empirical data for the 72 participants were analysed using the open-source software KADE Version 1.2.1 (Banasick, 2019). To group participants who sorted their cards in a similar way, we chose principal component analysis (PCA) to extract uncorrelated linear combinations of the observed Q sorts (Akhtar-Danesh, 2017), as this method is commonly used in Q methodology and it has yielded

the most informative factor structure in terms of content. After applying PCA as the extraction method, the factors were rotated using Varimax. Then Q sorts with a significant loading on one factor and no significant loadings on the other factors have been flagged manually to create a factor array (cf. introduction, table 1).

After qualitatively evaluating possible solutions with different numbers of factors, a three-factor solution, where the viewpoints have clearly distinguishable content aspects, was chosen. The qualitative interpretation of the three factors was done collaboratively by the research team. Two persons each wrote a description of the factor using the following procedure: First a within factor perspective was applied by taking a closer look at the poles, i.e., the top and bottom four items of each factor, and then at the items in between, as suggested by Watts and Stenner (2012). Based on this configuration of items, a first interpretation of the factor was written, which was refined in a second step by an across-factor comparison. Following the crib sheet method (Watts & Stenner, 2012), attention was paid to those items of a factor that distinguish it from the other factors. Furthermore, the demographic information from the post-sorting questionnaire was used to describe the group of people who were assigned to this factor. Finally, a meaningful title was written for each factor, describing its core content. Peer feedback was obtained from the other team members on the factor descriptions created in this way in the two-team process, and this feedback was used to refine the factor description. The final factor descriptions were discussed and finalised within the research team.

Results

In this section, the results are presented, with the quantitative characteristics being dealt with first, followed by the qualitative factor interpretation.

A total of 53 Q sorts loaded significantly (at ±0.463 at the $p < 0.01$ level) on only one of the factors. An additional 7 were confounded with significant loadings on more factors and 11 did not exhibit significant loadings. Together, the three factors explain 51% of the variance and share a rather high intercorrelation (F1+F2: 0.64; F2+F3: 0.61; F1+F3: 0.55), indicating that they are not mutually exclusive, but rather different manifestations of one consensus viewpoint (Watts & Stenner, 2012). We therefore labelled the three factors *manifestation M1 to M3*. On manifestation M1, 20 of the 53 Q sorts loaded, 22 Q sorts on manifestation M2, and 11 Q sorts on manifestation M3.

In the following section we will present the broad consensus of the shared viewpoint, followed by a description of the three different manifestations with regard to demographic information and the sorting of specific statements.

Broad consensus

The analysis and description of the results show that pre-service teachers at PHSG secondary who study at least one foreign language generally have a positive attitude towards plurilingualism. All of them emphasise the benefits of plurilingual approaches for language learning and both cognitive and affective negative effects of plurilingualism on language learning (e.g., interference, frustration) are considered to be marginal. At the same time, the pre-service teachers in this study do not believe that plurilingualism facilitates in-depth negotiation of one's own and foreign identities and cultures. The focus of their broad consensus viewpoint lies exclusively on the advantages of plurilingualism for language learning, while the cultural and personal aspects of plurilingualism are not accentuated.

Manifestation M1: Plurilingualism is a positive factor for language learning, but not central for successful communication (n = 20)

Demographic description

Of the total of 20 people (15 female, 5 male) assigned to this manifestation, 12 chose the arts profile with German as their main subject, and eight chose the natural sciences profile. This manifestation is represented by a very heterogeneous group that cannot be assigned to any specific language choice or study profile. They are distributed in between the second and eighth semester of their studies. 14 participants do not have any teaching experience while six students have only limited teaching experience of six months or less.

Description of the manifestation

The 20 pre-service teachers assigned to manifestation M1 agree that *plurilingualism is beneficial for learning other languages (#1/5)* and *enhances the awareness for similarities and differences between languages (#8/3).* They see plurilingualism as a tool in language learning, especially since it *raises the curiosity for other languages (#13/2),* is *beneficial for finding linguistic alternatives (#6/2)* and helps with *vocabulary learning (#10/2)*. Moreover, *plurilingualism enables communication in various languages (#17/4)* but is in turn not considered *central to successful communication (#16/-4).* From their point of view,

accordingly, communication does not often involve plurilingual language use. Furthermore, the participants assigned to this manifestation believe that *plurilingualism expands speaking competences in different languages (#4/3)*, while this does not mean that *several languages are spoken fluently (#18/-5).* Their opinion that *plurilingualism represents an added value for all people (#30/1)* and its *enrichment for language teaching (#12/1) is judged almost neutrally, but they* emphasise in particular its *chances on the labour market (#31/4).*

The individuals assigned to manifestation M1 believe that plurilingualism neither *reduces prejudices (#29/-3)* nor *leads to a reflection of personal values (#27/-4)*. The participants' beliefs are neutral with respect to the statements that plurilingualism *increases awareness of cultural diversity (#24/1), creates acceptance for cultures (#22/-1), enables different perspectives on the world (#21/0),* or *has an effect on the open-mindedness towards culture*s *(#23/0)*. It is believed that plurilingualism does not necessarily *foster calmness in dealing with people (#28/-1)* and that it doesn't *raise questions of identity* (*#26/-2).* Thus, a social and personal significance of plurilingualism for dealing with identity and other cultures is not central for these participants. Instead, they place particular emphasis on language learning agency and competence(s).

Manifestation M2: Plurilingualism is a positive factor for language learning, but not an opportunity to profoundly reflect on one's own or other people's identity (n = 22)

Demographic description

The 22 students assigned to this manifestation are mostly female (n = 19), have chosen the arts profile (with German as their major) except four individuals with the science profile. Ten students have selected English only as a foreign language while two study French as the only foreign language. The remaining ten students study multiple foreign languages (English, French or Italian) in different combinations. They are from the second to eighth semester. Half of them (n = 11) have no teaching experience at all and seven persons have a short teaching experience of six months or less. Four individuals have longer-term teaching experience beyond 6 months.

Description of the manifestation

The 22 pre-service teachers students associated with this manifestation of the viewpoint consistently consider plurilingualism as something positive, especially for language learning,

as it *enhances the awareness for similarities and differences between languages (#8/5)*, is *beneficial for learning other languages (#1/4)* and *increases the willingness to learn other languages* (#14/3). Accordingly, it is an *enrichment for language teaching (#12/4*). This positive attitude is accompanied by a rejection of possible negative emotions associated with plurilingualism. The persons clearly deny that *plurilingualism triggers negative feelings (#15/-5), is frustrating (#11/-4)* or *leads to difficulties in language learning (#2/-3).* Plurilingualism is thus perceived as unproblematic, which is also reflected in the rejection that it *causes confusion in language use (#9/-3)* or *leads to errors in the individual languages (#7/-3).*

In contrast to the positive attitude towards plurilingualism for language learning, its social and societal significance is judged to be less important. That plurilingualism *creates acceptance for cultures (#22/0), enables different perspectives on the world (#21/0), increases chances in the labour market (#31/0)* or *leads to a reflection of personal values (#27/0)* is judged neutrally. The statements that plurilingualism *can raise questions about identity (#26/-1), reduces prejudices (#29/-1)* or *fosters calmness in dealing with people (#28/-1)* are all considered slightly negative, and the view that plurilingualism *has an effect on the open-mindedness towards cultures (#23/1)* is only judged moderately positive. The social and personal significance of plurilingualism for coming to terms with one's own identity and other cultures is thus not the focus for these individuals.

Manifestation M3: Plurilingualism is a result of multiple languages learned, but languages have to be mastered at an advanced level (n = 11)

Demographic description

Of the 11 people (eight female, three male) assigned to this manifestation, ten have chosen the language profile with German as a major. Six of these study English, two French, one person studies both French and English, and two persons more than two languages. The students assigned to this viewpoint are distributed between the second and eighth semester but only one person was in their second and one person in their eighth semester at the time of the survey. Six students do not have any teaching experience and five students have only limited teaching experience of six months or less.

Description of the manifestation

The eleven pre-service teachers assigned to this manifestation think that *plurilingualism is beneficial for accessing languages that have not previously been learned (#19/5)* and *for*

learning other languages (#1/3). They also believe that *plurilingualism enables communication in various languages (#17/4)* but not that it *is central to successful communication (#16/-1)*. The individuals assigned to this viewpoint only speak of plurilingualism, if *several languages are spoken fluently (#18/4).* This perspective is strengthened by their belief that plurilingualism is not *part of every human being (#25/-4),* i.e., because not all people speak all their available languages fluently, not all people are plurilingual. They principally have a positive attitude towards plurilingualism, which is further emphasised by the fact that they do not associate negative emotions with plurilingualism: The participants disagree with the statements that plurilingualism *triggers negative feelings (#15/-5), is frustrating (#11/-4), causes confusion in language use (#9/-3),* or leads to *difficulties in language learning (#2/-3).* Plurilingualism is perceived as unproblematic but does not *foster calmness in dealing with people (#28/-3).*

Plurilingualism is not considered to significantly *increase awareness of cultural diversity (#24/-1), create acceptance for cultures (#22/1)* and *impact the open-mindedness towards cultures* (*#23/1*). Nevertheless, it enables *different perspectives on the world* (*#21/2*). At the same time plurilingualism is seen as an *enrichment for language teaching* (*#12/3*), as an opportunity to *expand speaking competences in different languages* (*#4/2*) or to *increase chances on the labour market* (*#31/2*). The statements that plurilingualism *leads to errors in the individual languages* (*#7/-2*) and that it represents *an added value for all people* (*#30/0*), are judged neutrally.

Table 2. Q sort values “Plurilingualism”.

	Manifestation	M1	M2	M3
1	Plurilingualism is beneficial for learning other languages.	5	4	3
2	Plurilingualism leads to difficulties in language learning.	-1	-3	-3
3	Plurilingualism holds potential for schools.	-2	-2	-2
4	Plurilingualism expands speaking competences in different languages.	3	3	2
5	Plurilingualism includes dialects.	0	-2	-2

6	Plurilingualism is beneficial for finding linguistic alternatives.	2	1	-1
7	Plurilingualism leads to errors in the individual languages.	0	-3	-2
8	Plurilingualism enhances the awareness for similarities and differences between languages.	3	5	1
9	Plurilingualism causes confusion in language use.	0	-3	-3
10	Plurilingualism helps with vocabulary learning.	2	2	3
11	Plurilingualism is frustrating.	-3	-4	-4
12	Plurilingualism is an enrichment for language teaching.	1	4	3
13	Plurilingualism raises curiosity for other languages.	2	2	1
14	Plurilingualism increases the willingness to learn other languages.	-1	3	0
15	Plurilingualism triggers negative feelings.	-3	-5	-5
16	Plurilingualism is central to successful communication.	-4	-2	-1
17	Plurilingualism enables communication in various languages.	4	1	4
18	Plurilingualism means that several languages are spoken fluently.	-5	-4	4
19	Plurilingualism is beneficial for accessing languages that have not previously been learned.	3	0	5
20	Plurilingualism includes partial competences in various languages.	1	1	0
21	Plurilingualism enables different perspectives on the world.	0	0	2
22	Plurilingualism creates acceptance for cultures.	-1	0	1
23	Plurilingualism has an effect on the open-mindedness towards cultures.	0	1	1
24	Plurilingualism increases awareness of cultural diversity.	1	2	-1
25	Plurilingualism is part of every human being.	-2	-1	-4
26	Plurilingualism can raise questions about identity.	-2	-1	0

27	Plurilingualism leads to a reflection of personal values.	-4	0	0
28	Plurilingualism fosters calmness in dealing with people.	-1	-1	-3
29	Plurilingualism reduces prejudices.	-3	-1	-1
30	Plurilingualism represents an added value for all people.	1	3	0
31	Plurilingualism increases chances in the labour market.	4	0	2

Contrasts among manifestations

In contrast to the other manifestations of the common viewpoint, the representatives of M2 emphasise the motivational effect of plurilingualism on the *willingness to learn other languages (#14/*M1: *-1; M2: 3; M3: 0)* most clearly. This corresponds to the comparatively high evaluation of the fundamental *added value for all people (#30/M1: 1; M2: 3; M3: 0).* However, it is striking and difficult to interpret that manifestation M2, in comparison to M1 and M3, sees the advantages of plurilingualism *for accessing languages that have not previously been learned (#19/M1: 3; M2: 0; M3: 5)* less clearly, although manifestation M2, as mentioned, is basically convinced of the advantage of plurilingualism for language learning.

The practical importance of plurilingualism for the ability to *communicate in several languages (#17/ M1: 4; M2: 1; M3: 4)* or the *increase of chances in the labour market (#31/ M1: 4; M2: 0; M3: 2)* are less clearly emphasised by manifestation M2 than by the other manifestations of the viewpoints. Manifestation M2 is also slightly critical (-1) towards the opinion that plurilingualism *is part of every human being (#25),* while this is more clearly negated especially by manifestation M3 (-4). Manifestations M1 and M2 both share a functional definition of plurilingualism, which does not presuppose the fluent mastery of several languages, while the representatives of M3 are of the opposite opinion (#18/M1: -5; M2: -4; M3: 4).

The representatives of manifestation M1 emphasise in line with M3 the most that plurilingualism *enables communication in various languages (#17/ M1: 4; M2: 1; M3: 4).* At the same time however, M1 does not reject strictly the statement that plurilingualism *causes confusion in language use (#9/ M1: 0; M2: -3; M3: -3).* M1 does also not decline that it may *lead to difficulties in language learning (#2/M1: -1; M2: -3; M3: -3)* as clearly as people assigned to the other manifestations of the viewpoint. Regarding language learning, M1 does

not recognize the same potential in plurilingualism in terms of willingness to learn other languages as representatives of M2 (#14/M1: -1, M2: 3; M3: 0).

The following statement on the cultural importance of plurilingualism differs strongly between viewpoints: *Plurilingualism leads to a reflection of personal values (#27)* is viewed neutrally by those assigned to manifestation M2 (0) as well as M3 (0) in contrast to a clear rejection by those assigned to M1 (-4).

The participants representing manifestation M3 affirm that plurilingualism means that *several languages are spoken fluently (#18/M1: -5; M2: -4: M3: 4)*, whereas M1 and M2 have a contrary view, which reflects a functional definition of plurilingual language competence. All three manifestations reject the statement that *plurilingualism is part of every human being (#25/M1: -2; M2: -1; M3: -4)*, albeit to different degrees, while their evaluation of the statement that *plurilingualism represents an added value for all people (#30/ M1: 1; M2: 3; M3: 0)* is more heterogeneous.

Interpretation and discussion

This section discusses the results before providing implications and further perspectives for teacher education.

The representatives of manifestation M1 see the contribution of plurilingualism in communication and language learning, whereby the focus is not on high competence levels, but on the development of partial competences. It can be assumed that these pre-service teachers consider plurilingualism as a diverse, dynamic repertoire with varying levels of competences as defined by the *CEFR* (Council of Europe, 2001). Thus, their understanding of plurilingualism is in line with the European and Swiss language policy, which puts the main emphasis on communicative ability and on the ability to use languages in a range of situations. Overall, the added value of plurilingualism for the individual is attributed to the functional and instrumental areas including the claim of higher chances on the labour market.

Pre-service teachers within manifestation M2 consistently see plurilingualism as something positive and are hardly aware yet of its methodological and social challenges. It is quite possible that these persons have internalised the advantages of plurilingualism conveyed by their lecturers and have not yet been exposed to the pressures of the field because they lack teaching experience or the experience of a language stay. To a certain extent, they are still in the «comfort zone» in which the positive arguments for plurilingualism predominate.

Representatives of manifestation M3 are concerned with the fluent use of a language. This aim is conceived in a more differentiated way in definitions of plurilingualism that focus

on the use of two or more languages at different levels in communication situations. The belief of representatives of manifestation M3 toward plurilingualism can be interpreted as an expression of pre-service teachers, who have learned the individual languages during their school years as language learners separately and set high language goals in each language. It may well be that these pre-service teachers believe that the individual languages should be taught in a fundamentally language-specific manner, albeit with appropriate plurilingual references. This view coincides with the situation in Swiss elementary schools, where the school-based teaching and learning of foreign languages starts at different points in the curriculum and language subjects are taught separately from each other, while, at the same time, references and links between languages and cultures are expected based on the *Lehrplan 21* (D-EDK, 2016) as the most important reference in German speaking part of Switzerland. Therefore, the beliefs of this group of pre-service teachers can be seen as reflecting the prevailing treatment of plurilingual methodology in foreign language teaching and learning, as an occasional supporting tool to achieve the given language-specific goals.

Implications and perspective

The description and analysis of the viewpoint shows that pre-service teachers at the PHSG who study at least one foreign language generally have a positive attitude towards plurilingualism. The analysis of the Q sorts allows a differentiated description of their beliefs about plurilingualism and helps specify the different profiles of students. It could be anticipated that pre-service language teachers enrolled in a crosslinguistic curriculum see plurilingualism as an advantage for learning and communication and that plurilingualism neither triggers frustrations nor negative feelings. It was surprising, however, that the participants did not agree more strongly with statements on the cultural and personal dimensions of plurilingualism. Participants may well have been inclined to confirm statements they have encountered in their modules and reject or at least judge neutral those statements that they have not or only marginally encountered so far. This insight can nonetheless be used for planning and developing both modules and curriculum.

Development and planning of crosslinguistic modules and curricular requirements

The design of this study makes it possible to apply Q methodology throughout the teacher education curriculum and the results can thus be used for planning and developing the content of individual crosslinguistic modules and the entire curriculum. On the level of the crosslinguistic modules, plurilingual and pluricultural teaching and learning should continue to

be a focus, but the examination of individual plurilingualism and intercultural aspects should be increasingly incorporated as well. While there is no strong overall agreement with the statements on these two dimensions among the participants, both are pronounced in individual students. This can be used as a basis for discussions in the courses and these exchanges would support confrontation and reflection on existing belief systems, aspects which are considered to help strengthen and develop plurilingual and pluricultural competences.

Limitations and future research

Studies have shown a relationship between lecturers' and pre-service teachers' beliefs (Steinmann & Oser, 2012; Valcke et al., 2010) and between lecturers' beliefs and learning opportunities they offer to their students (Biedermann et al., 2015). Since planning of the individual crosslinguistic modules is, to a large degree, the lecturers' responsibility, they have a prime role as agents of change towards plurilingual and pluricultural education, by systematically discussing not only content issues, but also beliefs, to create a shared culture and perspective, in this case on plurilingualism. At the same time, this change needs to be coordinated and supported by the institution, whose role it is to cater for aspects such as collaboration, ensuring cohesion, planning the lecturers' education, and providing the necessary funds for the "structural stabilisation" of the crosslinguistic curriculum (Carrasco Perea & Melo-Pfeifer, 2018).

Levin et al. (2015) indeed highlights the importance of supporting pre-service teachers in building their belief systems, and Fives and Buehl (2012) add that, beyond adequate support and guidance, sufficient time is needed to develop teachers' beliefs. Reusser et al. (2011) recommend situated problem- and action-based learning opportunities to enhance reflection of the profession's characteristics. However, these recommendations for the work on beliefs in general, and related to plurilingualism in particular, can only be incorporated selectively. Reasons include the reduced course hours in each target language for students who study more than one language (due to the crosslinguistic courses that are shared across language subjects), students' language competences, students' choice of subjects at the PHSG, and the fact that plurilingualism is merely one topic among many in teacher education.

The fact that representatives of all three manifestations reject, or at least do not accentuate the potential benefits of plurilingualism for the development of intercultural competences or personal aspects may also point to a methodological artefact. The concourse contains only a few negative statements and students are not particularly encouraged to voice critical beliefs. Instead, they may be inclined to mirror the general message conveyed in the

modules, namely that plurilingualism is beneficial for language learning. Accordingly, statements that are less strongly represented in the modules, such as a reflection of the effect of plurilingualism on intercultural and personal aspects, tend to be neutrally evaluated or rejected. This observation could also explain why the results can mainly be assigned to a single viewpoint only, albeit with three distinct manifestations.

Pre-service teachers' beliefs provide important clues for the design of general and crosslinguistic teacher education. Beliefs about plurilingualism could be recorded as part of a longitudinal survey at different points in the students' course of study and the results discussed in the modules. The beliefs could thus be studied systematically conforming with the respective training status of the pre-service teachers, in order to obtain a general overview of the current situation and its development. To conclude, the crosslinguistic curriculum provides an appropriate context for research addressing beliefs about plurilingualism, as the topic of plurilingualism is embedded in the content and structure of various courses throughout the curriculum.

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References

Akhtar-Danesh, N. (2016). An overview of the statistical techniques in q methodology: Is there a better way of doing Q analysis? *Operant Subjectivity*, *38*(3/4), 29–36. https://doi.org/10.15133/j.os.2016.007

Akhtar-Danesh, N. (2017) A Comparison between major factor extraction and factor rotation techniques in Q-Methodology. *Open Journal of Applied Sciences*, *7*, 147–156. https://doi.org/10.4236/ojapps.2017.74013

Allgäuer-Hackl, E., & Jessner, U. (2014). Und was sagt die Mehrsprachigkeitsforschung dazu? Neue Perspektiven in der Mehrsprachigkeitsforschung und deren Relevanz für Unterricht und LehrerInnenbildung. In A. Wegner & E. Vetter (Eds.), *Mehrsprachigkeit und Professionalisierung in pädagogischen Berufen. Interdisziplinäre Zugänge zu aktuellen Herausforderungen im Bildungsbereich* (pp. 125–145). Budrich.

Banasick, S. (2019). KADE: A desktop application for Q methodology. *Journal of Open Source Software, 4*(36), 1360. https://doi.org/10.21105/joss.01360

Baumert, J., & Kunter, M. (2006). Stichwort: Professionelle Kompetenz von Lehrkräften. *Zeitschrift für Erziehungswissenschaft*, 9. Jahrg., Heft 4/2006, 469–520.

Beacco, J.-C., & Byram, M. (2007). *De la diversité linguistique à l'éducation plurilingue. Guide pour l'elaboration des politiques linguistiques éducatives en Europe*. Conseil de l'Europe.

Beacco, J.-C., Byram, M., Cavalli, M., Coste, D., Egli Cuenat, M., Goullier, F., & Panthier, J. (2016). *Guide for the development and implementation of curricula for plurilingual and intercultural education.* Council of Europe. https://www.coe.int/fr/web/platform-plurilingual-intercultural-language-education/curricula-and-evaluation.

Biedermann, H., Steinmann, S., & Oser, F. (2015). «Glaubensbestände und Glaubenswandel»: Zur Transformation von konstruktions-und transmissionsorientierten Lehr-Lern-Überzeugungen in der Lehrpersonenausbildung. *Beiträge zur Lehrerinnen-und Lehrerbildung, 33*(1), 46–68.

Bleichenbacher, L., Kuster, W., Heinzmann, S., Hilbe, R., & Annen, M. (2019a). *Entwicklung sprachenübergreifender curricularer Elemente für die Ausbildung von Sprachenlehrpersonen Sek I* (2nd, Rev. Ed.). Pädagogische Hochschule St. Gallen. https://www.phsg.ch/sites/default/files/cms/Forschung/Institute/Institut-Fachdidaktik-Sprachen/CV/ESCEAS_Bleichenbacher%20et%20al%202019.pdf

Bleichenbacher, L., Goullier, F., Rossner, R., Schröder-Sura, A., Andrade, A.-I., Candelier, M., De Carlo, M., Diederich, C., Kuster, W. Vollmer, H.-J. (2019b). *A guide to teacher competences for languages in education. european centre for modern languages.* https://www.ecml.at/ECML-Programme/Programme2016-2019/Guidetoteachercompetences/Inventory/tabid/3024/language/en-GB/Default.aspx

Bleichenbacher, L., Schröder-Sura, A., Chesini, Ch., De Zanet, M., Gantenbein, C., Hilbe, R. (2023). Crosslinguistic teacher education: How self-assessment and reflection tools can support plurilingual student teachers. In S. Melo-Pfeifer, & Ch. Ollivier (Eds.), *Assessment of plurilingual competence in educational settings* (pp. 163-167). Routledge.

Blömeke, S. (Ed.). (2008). *Professionelle Kompetenz angehender Lehrerinnen und Lehrer: Wissen, Überzeugungen und Lerngelegeneiten deutscher Mathematikstudierender und-referendare; erste Ergebnisse zur Wirksamkeit der Lehrerausbildung*. BoD–Books on Demand.

Brown, S. R. (1993). A primer on Q methodology. *Operant subjectivity, 16*(3/4), 91–138.

Candelier, M., Camilleri Grima, A., Castellotti, V., de Pietro, J.-F., Lörincz, I., Meissner, F.-J., Schröder-Sura, A. & Noguerol, A. (2012). *FREPA - Competences and resources. a framework of reference for pluralistic approaches to languages and cultures*. Council of Europe / ECML.

Carrasco Perea, E., & Melo-Pfeifer, S. (2018). La integración curricular de la IC en los centros educativos: ¿proyecto futurible y sostenible? Un estudio comparativo Cataluña/Hamburgo. In Ch. Helmchen & S. Melo-Pfeifer (Eds..), *Multilingual literacy practices at school and in teacher education* (pp. 163-197). Peter Lang.

Caspari, D. (2014). Was in den Köpfen von Fremdsprachenlehrer(inne)n vorgeht, und wie wir versuchen, es herauszufinden. Eine Übersicht über Forschungsarbeiten zu subjektiven Sichtweisen von Fremdsprachenlehrkräften (2000–2013). *Fremdsprachen Lehren und Lernen, 43*(1), 20–35.

Council of Europe (2001). *Common European Framework of Reference for languages learning, teaching, assessment.* Council of Europe.

Council of Europe (2020). *Common European Framework of Reference for languages: Learning, teaching, assessment. companion volume with new descriptors.* Council of Europe.

D-EDK [Deutschschweizer Erziehungsdirektoren-Konferenz] (2016). *Lehrplan 21: Fachbereich Sprachen*. https://v-fe.lehrplan.ch/index.php?code=b|1|0&la=yes

Ernest, J. M. (2011). Using Q Methodology as a mixed methods approach to study beliefs about early childhood education. *International Journal of Multiple Research Approaches*, 5(2), 223–237. https://doi.org/10.5172/mra.2011.5.2.223

Fives, H., & Buehl, M. M. (2012). Spring cleaning for the "messy" construct of teachers' beliefs: What are they? Which have been examined? What can they tell us? In K. R. Harris, S. Graham, & T. Urdan (Eds.), *APA educational psychology handbook. Volume 2: Individual differences and cultural and contextual factor* (pp. 471-499). American Psychological Association.

Gogolin, I. (1994). *Der monolinguale Habitus der multilingualen Schule*. Waxmann.

Hu, A. (2017). Mehrsprachigkeit. In C. Surkamp (Ed.), *Metzler Lexikon Fremdsprachendidaktik: Ansätze – Methoden – Grundbegriffe* (pp. 246-248). Metzler.

Hufeisen, B. (2010). Bilingualität und Mehrsprachigkeit. In W. Hallet & F. G. Königs (Eds.), *Handbuch Fremdsprachendidaktik* (pp. 376-381). Kallmeyer/Klett.

Hutterli, S. (Ed.) (2012). *Koordination des Sprachenunterrichts in der Schweiz – Aktueller Stand, Entwicklungen, Ausblick*. Berne: EDK / CDIP / CDPE / CDEP.

Issler, R. A (2016). Mehrsprachigkeit und kulturelle Vielfalt. Ein bildungsorientierter Ansatz für die romanischen Fremdsprachendidaktiken. In Geiss, P., Issler, R. A., Kaenders, R. (Eds.). *Fachkulturenin der Lehrerbildung* (pp. 107-154). Vandenhoeck & Ruprecht.

Levin, A., Meyer-Siever, K. & Johanna, G. (2015). Epistemologische Überzeugungen zur Mathematik von ErzieherInnen und PrimarstufenlehrerInnen im Vergleich. *Frühe Bildung*, *4*(1), 17–25. https://doi.org/10.1026/2191-9186/a000189.

Lundberg, A. (2019a). Teachers' viewpoints about an educational reform concerning multilingualism in German-speaking Switzerland. *Learning and Instruction*, 64, 101244.

Lundberg, A. (2019b). Teachers' beliefs about multilingualism: Findings from Q method research. *Current Issues in Language Planning*, 20(3), 266–283.

Lundberg, A. (2020). *Viewpoints about educational language policies. Multilingualism in Sweden and Switzerland*. Malmo University Press. https://doi.org/10.24834/isbn.9789178770779

Lutfallah, S., & Buchanan, L. (2019). Quantifying subjective data using online Q-methodology software. *The Mental Lexicon*, *14*(3), 415–423.

Meißner, F.-J. (2004). Sprachenlernen zusammendenken. Aufhören, Rücken an Rücken zu forschen, zu planen, zu lehren und zu lernen. In K.-R. Bausch, F.G. Königs & H.-J. Krumm (Eds.), *Mehrsprachigkeit im Fokus. Arbeitspapiere der 23. Frühjahrskonferenz zur Erforschung des Fremdsprachenunterrichts* (pp. 157-167). Narr.

Meißner, F.-J., & Reinfried, M. (Eds.) (1998). *Mehrsprachigkeitsdidaktik, Konzepte, Analysen, Lehrerfahrungen mit romanischen Fremdsprachen*. Narr.

Manno, G. (2022). Überzeugungen von Lehrpersonen über die Mehrsprachigkeitsdidaktik in der Schweizer Volksschule: eine Zwischenbilanz im Rahmen der Umsetzung der Fremdsprachenreform. In C. Koch, C. & M. Rückl, M. (Eds.). *Au carrefour de langues et de cultures: Mehrsprachigkeit und Mehrkulturalität im Französischunterricht* (pp. 125-144). Ibidem Verlag.

Nelson, S. W., & Guerra, P. L. (2014). Educator beliefs and cultural knowledge: Implications for school improvement efforts. *Educational Administration Quarterly*, *50*(1), 67–95.

Portolés, L. & Martí, O. (2020). , Teachers' beliefs about multilingual pedagogies and the role of initial training. *International Journal of Multilingualism 17*(2), 248–264. https://doi.org/10.1080/14790718.2018.1515206

Reusser, K., Pauli, C., & Elmer, A. (2011). Berufsbezogene Überzeugungen von Lehrerinnen und Lehrern. In E. Terhart, H. Bennewitz & M. Rothland (Eds.), *Handbuch der Forschung zum Lehrerberuf* (pp. 642-661). Waxmann.

Rokeach, M. (1972). *Beliefs, attitudes and values: A theory of organization and change*. Jossey-Bass.

Sauer, E. & Saudan, V. (2008). *Aspekte einer Didaktik der Mehrsprachigkeit: Vorschläge zur Begrifflichkeit. Arbeitsgruppe Rahmenbedingungen Passepartout.* https://www.sprachenunterricht.ch/sites/default/files/Didaktik-der-Mehrsprachigkeit.pdf

Shulman, L. (1986). Those who understand: knowledge growth in teaching. *Educational Researcher*, *15*, 4–14.

Steinmann, S., & Oser, F. (2012). Prägen Lehrerausbildende die Beliefs der angehenden Primarlehrpersonen? Shared beliefs als Wirkungsgrösse in der Lehrerausbildung. *Zeitschrift für Pädagogik*, *58*(4), 441–459.

Valcke, M., Sang, G., Rots, I., & Hermans, R. (2010). Taking prospective teachers' beliefs into account in teacher education. In P. Peterson, E. Baker & B. McGaw (Eds), *International encyclopedia of education* (vol. 7, pp. 622-628). Elsevier.

Vetter, E. (Ed.) 2013. *Professionalisierung für sprachliche Vielfalt*. Schneider Verlag Hohengehren.

Watts, S., & Stenner, P. (2012). *Doing Q Methodological Research: Theory, Method and Interpretation*. SAGE.

Wiater, W. (2006). Didaktik der Mehrsprachigkeit. In W. Wiater (Ed.), *Didaktik der Mehrsprachigkeit. Theoriegrundlagen und Praxismodelle* (pp. 57-72). Verlag Ernst Vögel.

Ziegler, G. (2013). Multilingualism and the language education landscape: Challenges for teacher training in Europe. *Multilingual Education*, *3*(1). https://doi.org/10.1186/2191-5059-3-1

Chapter 7

The post-sort interviews in Q methodology: L2 Chinese teachers' beliefs about motivational teaching

Chengwen Yuan

Introduction

In a typical Q methodological study, interviews are usually facilitated to assist factor interpretation (Lundberg et al., 2023; Watts & Stenner, 2012). Using participants' own words for the factor interpretation is a common and important practice in a Q methodological study (see e.g., Fraschini & Park, 2021; Lu & Geng, 2022). As Gallagher & Porock (2010) suggest, interviews can help achieve a richer, deeper and more detailed understanding of each participant's Q sorting thus reducing errors of factor interpretation. However, the case of Irie et al. (2018) shows that, although reluctantly and despite their richness, interview data may be omitted from papers reporting on Q studies due to space limitations.

In response to Irie et al. (2018), Haukås & Mercer (2022) attempt to focus more on the data gathered from the interviews instead of Q sorting data to investigate pre-service language teachers' mindsets about teaching competencies. A total of 12 participants were first asked to complete a simplified Q sorting task of 13 statements on an unforced continuum scale (from 1 to 6), and then explain their sortings in a semi-structured interview. In this study, the sorting task, on the one hand, allows participants to view teaching competencies as an interconnected system in a holistic way. On the other hand, it proves to be an effective method to trigger participants' reflection and critical discussion during the interviews. The semi-structured interviews, facilitated by the sorting task, substantially revealed the nuances and complexity of mindset systems. In Haukås & Mercer's (2022) study, its sorting task is only a simplified version of Q sorting and the analysis of the sorting task data is very different from the Q methodology factor analysis. Researchers have not yet maximised the use of interviews in Q methodological studies. Therefore, this chapter attempts to provide an example of using interviews associated with Q methodology. The following sections will review the post-sort interview in a Q methodological study, followed by an example of conducting an interview using Q methodology, using it to illustrate the data and discussing how Q methodology can facilitate interviews.

The post-sort interview in a Q methodological study

As Watts and Stenner suggest (2012), the final but not essential step of data collection in a Q methodological study is to gather post-sort information, which can be achieved via an open-ended questionnaire or an interview. Compared to the use of questionnaires, interviews are proved to be a more powerful tool in eliciting narrative data that allows researchers to investigate people's subjectivity in greater depth. In general, there are two types of post-sort interviews in terms of when to conduct: before or after Q factor analysis (Wolf, 2014).

The results of Q factor analysis show the correlation between individual participants' sorts and each factor, known as factor loading. Post-sorting interviews being conducted after Q factor analysis are for those participants whose sorts significantly load on a single factor to check the narrative description of the factors (Albright et al., 2019). For instance, Peng and Wu (2022) use Q methodology to explore the motivational profiles of Chinese university students majoring in Spanish. A total of 47 university students were recruited to complete Q sorts while three factors emerge from the Q factor analysis. The individual post-sort interviews were conducted for 10 students individually who significantly load on one of the three factors. The interview protocol included six questions based on the major themes around the Q statements in the factor array. Relevant excerpts from the interviews are included in the factor interpretations to support the quantitative values of statements.

Another example is Lundberg et al.'s (2023) study, which investigates the subjective perspectives about 'subjectivity' via Q methodology. Forty-six Q sorts are collected from each participant to generate five factors using Q factor analysis. Only three participants with the higher factor representatives were selected to be interviewed. In their interviews, there were three steps. First of all, participants were shown the description of all five factors without the ranking of statements and asked to recognise the factor which they significantly load on. Second, the description of the factor with the ranking of statements was shown to the participants. They were asked to comment on the statements they felt strongly about and where the description did not really match their perspective. In the last step, participants were shown the factor array as well as their own Q sorts and then asked to comment on the statements with the greatest discrepancy. Based on the additional information from the interviews, the final factor interpretations were adopted. In addition, the interview data were incorporated in the discussion part to produce a deeper understanding of 'subjectivity'.

Clearly, the protocol in the interview after Q sort analysis usually focuses on questions about statements in the Q sort. Interview data are usually employed to facilitate factor

interpretations and further discussions (Albright et al., 2019). Therefore, this type of interview only functions as member checking, a commonly used means of achieving validity in qualitative research (Candela, 2019).

Another type of interview is being organised before Q factor analysis. Since the results of Q factor analysis have not come out yet, a purposive sample of the participants based on their representation by a specific factor cannot be applied. Therefore, this type of interview usually applies to every participant. Wolf (2014) further explains that the interview before Q factor analysis should be conducted right after the completion of Q sorting so that participants can express the rationale and experience associated with the sorting moment as the Q sorting itself can evoke participants' perspectives. She argues that this type of interview is more consistent with Stephenson's (1953) main idea of Q methodology, which not only captures subjectivity but also provides the underlying factors contributing to subjectivity. As Stephenson (1986) states, "based on the past experiences the individual develops interest, values, beliefs and the like, not as items of knowledge of information stored up in memory, but active systems which determine what the individual will perceive or react to" (Stephenson, 1986, p. 53). Shemmings and Elligsen (2012) also suggest that the immediate post-sort interview not only can assist factor interpretation but also provide the whole picture of the research topic. Therefore, the immediate interview right after Q sorting can be employed to conduct a related but stand-alone qualitative study to investigate complex systems underlying people's subjectivity.

In the interview before Q factor analysis, Wolf (2014) recommends two sets of questions, statement-focused and people-focused, in the protocol. Statement-focused questions steer participants into a conversation about the meaning and significance of the statements. Participants are encouraged to comment on why they agree or disagree with certain statements which are ranked at both ends of the Q sort grid. Another set of questions, people-focused questions, are more unique in the interview before Q factor analysis. These questions direct a conversation to elicit aspects of participants' personal experience stimulated by the Q sorting. Participants' attention can be shifted from specific statements to a wider understanding of the research issue when they reflect on past events.

Compared to the interview after Q factor analysis, the interview before Q factor analysis is less commonly seen in Q methodological studies. However, Watts and Stenner (2012) suggest that the interview before Q factor analysis not only facilitates factor interpretation but also opens up the possibility of a follow-up qualitative study.

The research project

This chapter reports findings from a large research project investigating Chinese as a Second Language (CSL) teachers' beliefs about motivational teaching in Australian secondary schools. There were two research questions in this research project: 1. What teaching beliefs about how to motivate students are held by L2 Chinese teachers? 2. What are the major sources of these beliefs? In this research project, 25 CSL teachers with diverse backgrounds were recruited as participants. Each participant completed a Q sorting and took part in an immediate post-sort interview.

The first part of this project was to identify diverse beliefs about how to motivate students held by CSL teachers using Q methodology. In this research project, the concourse was developed on the basis of a literature review concerning L2 learning motivation, L2 teaching methods and Teaching Chinese as a second language. A total of 48 statements were selected as a representative sample of motivational teaching strategies from the concourse. Twenty-five CSL teachers were instructed to complete Q sorting guided by the question of 'how to motivate your students ranging from Year 7 to Year 9 to learn Chinese as a second language'. From the factor analysis of the Q sorts, four factors are identified, namely, subject-centred, student-centred, effort-promoting and competition-encouraging. All four factors of teachers realise that simply following the structure of any given textbook closely or teaching to the test are not suitable approaches in Australia. However, these teachers demonstrate different opinions on how to highlight students' efforts, create a fun learning environment and empower students as partners in their learning. More details can be found in Yuan and Lo Bianco's (2022) paper.

The second part of this research project was to engage in a follow-up qualitative interview study to figure out why CSL teachers embrace various teaching beliefs. The second part of this research project will be used as an example to show how the procedures were designed, conducted and analysed in the follow-up qualitative interview study using Q methodology. This chapter is dedicated to the exploration of interviewing, that is considered as an optional step of data collection step in Q methodological research. By focusing on the interviewing process, the goal of this chapter is to provide insights into the significant roles of interviews to investigate people's subjectivity in Q methodological research, particularly in the context of teachers' beliefs. While delving into the intricacies of how Q methodology and post-sorting interviews work together, it is essential to clarify that this chapter is not a complete Q methodology study per se.

Designing the interview

For the purpose of exploring why CSL teachers have different beliefs, an interview before Q factor analysis was chosen for this research project. Following Wolf's (2014) recommendations, both statement-focused questions and people-focused questions were included in this research project.

The four statement-focused questions encouraged participants to comment on why they agree or disagree with certain statements at both ends of the grid, including -5, -4, +4 and +5:

1. Please explain why you mostly agree with the statements you placed below +5.
2. Please explain why you also strongly agree with these statements you placed below +4.
3. Please explain why you mostly disagree with the statements you placed below -5.
4. Please explain why you also strongly disagree with these statements you placed below -4.

As people-focused questions aim to obtain participants' wider understanding of the research topic (Wolf, 2014), literature concerning language teachers' beliefs contributed to the design of people-focused questions in this study. The development of L2 teachers' beliefs is complex and nuanced (Barcelos & Kalaja, 2011). L2 teachers' prior experience, including learning experience, teacher education experience, and teaching experience play important roles in teachers' belief development (Borg, 2015). Moreover, the current social, cultural and institutional teaching contexts where teachers are situated also create an impact on their beliefs; these contextual elements may lead to changes in beliefs (Borg, 2015). It is worth noting that all causes mentioned above are not in a simple cause-and-effect relationship about the development of certain L2 teachers' beliefs, as beliefs are characterised by a complex dynamic system (Barcelos & Kalaja, 2011). To explore the impact of potential elements on CSL teachers' beliefs about how to motivate students, a set of four people-focused questions were further developed:

5. Please describe your second language learning experience. Do you feel that your learning experience has influenced your thoughts about this topic?
6. Please describe your teacher education experience. Do you feel that your teacher education experience has influenced your thoughts about this topic?
7. Please describe your teaching experience. Do you feel that your teaching experience has influenced your thoughts about this topic?

8. Please describe your current teaching context. Do you feel that your current teaching context has influenced your thoughts about this topic?

A pilot study was conducted on two CSL teachers in order to assess the feasibility of the interview protocol. It was found that the participants' answers to statement-focused questions were mostly related to their interpretation of the current teaching context. Since the process of Q sorting and post-sort interviews was very time-consuming, it was decided that Interview Question 8 about the teaching context should be discarded based on the participants' feedback.

This research project targets CSL teachers in Australia, who are Chinese-English bilinguals, and most of them are first language (L1) users of Chinese (Weinmann et al., 2021). The language choice for data collection instruments necessitated extra consideration in the research design.

As Q sort data are represented by ranking values, participants are required to rank statements onto the distribution grid following the condition of instruction (Watts & Stenner, 2012). As the majority of statements in the Q set for this research project originated from existing literature in English (for details, see Yuan & Lo Bianco, 2022), English was chosen as the medium of instruction for the Q set and Q sorting.

The second collection instrument in this study was the post-sort interview. Languages used in the interviews include the main form of data, which comes from the speech of the participants. Previous studies have shown that participants prefer to use their L1 in the interviews since they can express their personal thoughts, emotions and beliefs with more freedom and confidence (Hennink, 2008; Rolland et al., 2019). Also, the language and cultural background of the researcher has an influence on the participants' language choices (Squires, 2009). When cultural and ethnic similarities manifest during the initial conversations between the researcher and participants, participants tend to use their common L1 in the interviews. Moreover, influenced by traditional Chinese culture, some L1 Chinese speakers tend to hold listening-oriented stances and have reserved expressions in interviews (Cortazzi et al., 2011). To enable participants to express their meaning themselves free from any language barrier, this research project allowed the participants to select their preferred language for the interview, either Mandarin Chinese or English, to ensure smooth communication and accurate expression of their ideas. The participants were also informed that switching codes between two languages were permitted at their convenience. In the pilot study, two CSL teachers, who were L1 users

of Chinese, both chose to use Mandarin Chinese as the medium of communication in the interview.

Conducting the interview

All data collected in this study was in accordance with the ethics guidelines provided by the University of Melbourne Human Research Ethics Committee. All participants were informed of the purpose of the study, the details of participation in the study, and potential risks, especially the estimated long-time commitment via the consent form and plain language statement.

In this study, data was collected in a face-to-face situation with each participant. A post-sort interview was conducted after the completion of Q sorting. This interview was then followed by a semi-structured protocol guided by the above mentioned four statement-focused and three people-focused questions mentioned previously. Each interview was audio-recorded with the use of a digital voice recorder, and a quiet environment was secured to ensure the best quality of the recording.

A total of 19 participants preferred to use Mandarin Chinese as the interview language, while all of them were L1 users of Chinese. The remaining six participants preferred to use English for the interview. The remaining six participants, which include one L1 user and five L2 users of Chinese, preferred to use English for the interview. The length of interviews lasted from 28 minutes (shortest) to 70 minutes (longest), as the average duration was 45 minutes.

Analysing the interview

As the original form of interview data was audio-taped recordings, the first step was to transcribe the verbal conversation into written form. Conventional verbatim transcription, referring to word-for-word reproduction of verbal data (Poland, 1995), was employed in this study. As some interview data were in bilingual format, it was worth noting that all Chinese components of the conversation were transcribed in Chinese script, while all English parts were written in standard English script. In addition, all Chinese interview data were translated into English. In the translation process, the standard principle was to preserve the exact expression of the original texts to avoid putting extra words into others' mouths.

Grounded theory method is widely used in the field of qualitative research, especially in interviews (Charmaz & Belgrave, 2012; Thornberg & Charmaz, 2014). In this research project, grounded theory method guided the following coding process and transformed raw data into a conceptual level. Concepts were first created during the line-by-line examination of

data in open coding. Once the initial step had been completed, all concepts, as a discrete data set, were further examined for preliminary similarity and some concepts would be grouped into categories. Each translated transcript was then processed for the second time, taking the first sets of concepts and categories and identifying potential concepts that could be missed out in the open coding. In the subsequent step of axial coding, categories identified in the open coding were compared and refined into new categories on a higher level of abstraction based on the emerging relationship among categories. Some new categories were employed to reverse what was identified in the opening coding. During the selective coding, central categories of greater potential explanatory power were selected, while central categories were organised in a system of subcategories. This set of categories and sub-categories was continually re-examined by the data again. The final phase of coding in this study produced four central categories, eight categories, and eighteen sub-categories.

The results of Q sort analysis were compared to those of the interview analysis. Similar patterns were found in the relevance of categories and sub-categories generated from the interviews. For example, only three participants believed that professional teaching associations, supporting general language teachers were more important than those only looking after CSL teachers. These three participants were found to be all associated with Factor Two (student-centred factor), which manifested the importance of students' holistic skill development in Chinese teaching.

As four factors emerged from Q sort analysis, four distinctive beliefs development routes of each factor were identified with the interview data (for details, see Yuan, 2022). CSL teachers' beliefs about motivational teaching prove to be a complex system emerging from the dynamic and entangled interactions among teachers' diverse L2 learning experience, teacher education experience, teaching experience, and their interpretation of the current teaching contexts. The following section will focus on the methodological discussion drawn from the use of Q methodology to facilitate interviews.

Statement-focused and people-focused questions in post-sort interviews

Wolf (2014) identified the difference between statement-focused and people-focused questions. Statement-focused questions steer participants into a conversation about the meanings in the statements, while people-focused questions can tap into the experience of the people, which is called a vector of a person's lived experience' by Stephenson (1986). The results of this research project further support Wolf's (2014) distinction between these two types of questions.

Whilst responding to statement-focused questions, most participants explained their understanding of each statement in detail and foregrounded the related teaching contextual elements. For instance, one participant described the communicative-oriented L2 teaching in Australia and the characteristics of Australian students whilst answering a statement-focused question. The answer demonstrated this participant's interpretation of the current teaching context.

> I strongly agree with statement 31 (teachers should include communicative games where students exchange meaningful information). Compared to China, more activities are taking place in Australian classrooms. In addition to mechanical imitation, it is important to provide students with opportunities for output. Students will feel a sense of achievement if they can complete certain tasks in the activities.

When addressing these people-focused questions, participants generally described their experience, which was not directly related to the statements in the Q sort. People-focused questions allowed participants to respond to the research topic, and factors contributing to their teaching beliefs, more widely. For example, one participant mentioned that she studied English by rote learning, but she was not strongly against rote learning as a student at that time. Even now, she still believed that the rote learning had laid a foundation for her English.

> I learnt English in China. At that time, the traditional education system in China was based on teachers' lectures and students' memorisation of the correct answers. In English classes, most of the time, the content was about the accuracy of grammar and vocabulary instead of the practical usage of languages, like speaking and communication. It did not mean a great deal to me when I was taught English traditionally in China. In fact, I was a good student, and I had no trouble following teachers' instructions. That's why my English is pretty proficient, as I simply listened to my teachers.

The data generated by people-focused questions enabled a comprehensive picture of participants' experience. The beliefs held by L2 teachers are formed by their prior experience in unique and unpredictable ways rather than a product of a chain of cause and effect (Barcelos & Kalaja, 2011). Moving between data from statement-focused and people-focused questions,

some patterns were found between teachers' experience and the construction of their teaching context.

Advantages of post-sort interviews

In this research project, post-sort interviews, which are supplemented by Q methodology, allow the complexity of CSL teachers' belief development to emerge. The Q sorting task can be used as the stimulus for eliciting in-depth rich information during the interviews. Besides, the results of Q sort analysis provide a form of triangulation for researchers to analyse interview data (Carter, et al., 2014).

As Dörnyei (2007) suggests, one feature of a good qualitative interview is that it flows naturally. That is to say, the interviewer should create an appropriate atmosphere for participants to feel comfortable and talk freely. The Q sorting task can be used as an effective method to create such an atmosphere. Similar to Wolf's (2014) study, participants in this research project were also eager to be interviewed. Many participants reported that the Q sorting procedure generated their thoughts and reflections which they had not realised before. The immediate post-sort interviews happened to provide these participants with opportunities to express their deep reflections on the spot. For example, one of the participants commented on the benefit of performing Q sorting before the interview:

> When I reflect on the question of how to motivate students, it is very complex. I need to take a lot of factors into consideration, such as students' characteristics, my teaching competence and the requirements of schools. If you directly asked me how to motivate students, I would just list several teaching strategies. However, the process of performing Q sorting has allowed me to consider trade-offers for certain strategies and rearranged them in relation to each other. I really want to tell you why I arrange these strategies this way.

In addition, each statement in a Q set represents a specific concept or idea associated with the big picture of the research question (Watts & Stenner, 2012). When participants were asked to explain their rationale behind the ranking for each statement, they often provided detailed explanations. This is consistent with another feature of a good qualitative interview, which is often rich in detail (Dörnyei, 2007). In this research project, there were many details presented in these teachers' answers. For instance, one participant first illustrated her general

idea through her answer to a statement-focused question about the importance of classroom discipline, and she subsequently then added two specific reasons:

> I mostly agree with statement 3 (teachers should establish authority by setting strict classroom regulations). If there is no good classroom discipline, I cannot teach anything to my students. My students are very naughty and classroom management is a big challenge for me. Besides, my lack of classroom management strategies has forced me to set strict regulations for students' behaviours in class. In this case, I am able to at least teach some Chinese.

Moreover, when performing Q sorting, participants are encouraged to consider the research topic in a holistic way (Watts & Stenner, 2012). That is to say, they should think deeply about the interrelationships between statements. This holistic view was also found in many participants' interviews:

> I quite agree with statement 39 (teachers should encourage students to speak Chinese outside the classroom). The reason can also apply to statement 27 (teachers should enrich learning materials by bringing authentic materials). I firmly believe that the ultimate purpose of learning an L2 is to communicate with others in the L2. This idea is from my personal learning experience.

Besides, previous studies demonstrate that some ethnic Chinese people are reluctant to disclose their thoughts and opinions in traditional interviews (Cortazzi et al., 2011). In this research project, there were no significant differences between participants who were L1 users and L2 users of Chinese in terms of self-disclosure in the interviews. Most interviews lasted for about 45 minutes on average, which was longer than the normal duration of an interview (Schostack, 2002). Participants, including L1 users of Chinese, showed great frankness, especially when they explained why they disagreed with particular motivational strategies:

> I disagree with statement 24 (teachers should encourage students to raise their questions when necessary, even if that means interrupting the teachers). In Australia, it is very common for lecturers to say something like 'during my presentation, please stop me if you have any questions'. However, I disagree with this idea. When I do my lesson plans, I have minimised the time for a didactic talk. If students interrupt me, teaching

> efficiency will be negatively affected. In addition, students in Australia should develop a good habit of listening to others. I feel that many students here do not have the patience to listen to others.

Apart from this, the analysis of interview data is a subjective process, depending on the insights and capabilities of the researchers (Patton, 1999). Brewerton and Millward (2001) claim that interviews have poor reliability due to the openness to so many types of bias. While the factor analysis of Q methodology uses sophisticated statistical techniques, the researchers have less influence on the results compared to the analysis of interview data. The findings generated by Q sort data can be used to check the consistency of the interview data to strengthen the reliability of the interview analysis.

Moreover, Q methodology and post-sort interviews enable the discovery of subjectivity and the underlying complexity that gives rise to subjectivity (Stephenson, 1953). In the post-sort interviews, participants related their experience and interpretation of the teaching context to the Q sorting. The data generated by Q sorts and post-sort interviews have allowed us to glimpse into the intricate and entangled relationships between teaching beliefs, teachers' experience, and interaction with the current teaching context. For example, Factor One, Factor Three and Factor Four teachers mainly constructed the teaching context as highly restrictive while Factor Two teachers regarded the teaching context as enabling them to use a variety of innovative teaching approaches. The key factor behind the two different constructions of a similar teaching context is more related to the impact of teacher education programs (Ruohotie-Lyhty, 2015).

Last but not the least, post-sort interviews can also help us understand subtle differences and similarities across factors or across participants. Some factors of participants ranked certain motivational strategies similarly but the reasons could be different. For instance, all four factors of CSL teachers strongly disagree with the heavy reliance on textbooks. On the one hand, some CSL teachers believed that the pre-arrangement of the content knowledge in the textbook can hardly meet the diversified and dynamic needs and interests of students nowadays. They rejected the heavy reliance on textbooks.

> Today's textbooks cannot keep pace with the development of the world now. Textbooks have many limitations. For example, most textbooks are topic-based or theme-based. Today, we teach the topic of clothes. Tomorrow, we teach the topic of sports. Of course, textbooks have their logic, starting from the straightforward part,

> the introduction and then to the assessment. But one limitation of textbooks is that it is challenging for us to connect textbooks with the changing world. It is effortless to solidify the thinking of students and the style of teaching.

On the other hand, the lack of suitable textbooks for students from non-Chinese backgrounds has given CSL teachers not many choices to include textbooks in their teaching. The reason why they rejected the heavy reliance on textbooks was due to the poor supply of the product.

> Current Chinese books, so-called textbooks, are mostly based on Chinese thinking. They are not suitable for non-Chinese background Australians who get used to Western-style thinking. I think there are no appropriate textbooks at present now. I have taught about four or five different books. They are published by Foreign Language Teaching and Research Press Co., Ltd or sponsored by Hanban. I think all those textbooks focus on vocabulary or grammar. The teaching style is more like the 80s and 90s styles. They are similar to New Concept English. The teaching idea in those textbooks is still like the kind of thinking in the 1980s and 1990s.

The disadvantage of post-sort interviews

The main disadvantage of conducting post-sort interviews is the huge time consumption for the participants. In this research project, the process of Q sorting and interview lasted for over an hour for each participant. Gallagher and Porock (2010) argue that a long process might affect participants' concentration. Therefore, it is better to conduct a Q sorting first and do the interview at an agreed time afterwards, while more research should be engaged to investigate the correlation between the duration and research findings (Gallagher & Porock, 2010).

In addition, the time commitment was another barrier to recruiting participants for the research study. Some participants withdrew from the research project after they realised the enormous time required from themselves. Hence, it took more than five months to recruit 25 participants for this study. Moreover, post-sort interviews are only recommended but not compulsory in a Q methodological study. It is also difficult to present and analyse post-sort interview data in a typical journal article along with the findings of Q sorts due to the word limit. If post-sort interviews are only used to facilitate factor interpretation, a considerable amount of rich and complex data may be overlooked or unexplored. Therefore, using a written

post-sort questionnaire to obtain relevant information for factor interpretation could be a more practical and efficient approach.

Implications and conclusions

Beliefs are characterised as a complex and dynamic system made up of interacting components, all of which are in a dynamic relationship within the immediate environment (Barcelos & Kalaja, 2011). Q methodology and post-sort interviews prove to be powerful methods to investigate the complexity of teachers' beliefs, prior experience and foreground dynamic and complex interactions with the surrounding teaching context. Statement-focused questions reveal how participants understand statements in detail and construct the teaching context while people-focused questions elicit participants' experience related to the formation of teaching beliefs.

From the methodological perspective, a combination of Q methodology and interviews has the potential to help researchers to obtain rich and deep information from reticent participants. The Q sorting process evokes participants' reflection on the research topic and statements in the Q sample also elicit participants' expressions. Moreover, checking the findings generated by Q methodology and interviews can achieve triangulation, thus enhancing the quality and credibility of qualitative analysis.

The result of this study can serve as a foundation for L2 teacher education to develop tailor-made pre-service teacher education programs and in-service teacher professional development (PD) programs for CSL teachers in the future. The pre-service teacher education program should support relevant teachers in their attempts to navigate the complex teaching context with all its possibilities and constraints. Some motivational strategies which were disagreed by all four factors of teachers should be highlighted for further discussion. In addition, more examples of the implementation of these strategies should be presented or analysed. In addition, this research project also bears some methodological implications for future studies involving bilingual participants. The language used in data collection instruments should be considered for the overall purpose to get accurate and authentic data.

References

Albright, E. A., Christofferson, K., McCabe, A., & Montgomery, D. (2019). Lessons learned: Some guidelines to factor interpretation. *Operant Subjectivity, 41*, 134-146. doi:10.15133/j.os.2019.001

Barcelos, A. M. F., & Kalaja, P. (2011). Introduction to beliefs about SLA revisited. *System, 39*(3), 281-289.

Borg, S. (2015). *Teacher cognition and language education: research and practice*. Bloomsbury Publishing.

Brewerton, P. M., & Millward, L. J. (2001). *Organizational research methods: A guide for students and researchers.* SAGE.

Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). *The Use of Triangulation in Qualitative Research*. Paper presented at the Oncology Nursing Forum.

Candela, A. G. (2019). Exploring the function of member checking. *The qualitative report, 24*(3), 619-628.

Charmaz, K., & Belgrave, L. (2012). Qualitative interviewing and grounded theory analysis. In J. Gubrium (Ed.) *The SAGE handbook of interview research: The complexity of the craft* (2nd ed, pp. 347-365). SAGE.

Cortazzi, M., Pilcher, N., & Jin, L. (2011). Language choices and 'blind shadows': investigating interviews with Chinese participants. *Qualitative Research, 11*(5), 505-535.

Dörnyei, Z. (2007). *Research methods in applied linguistics: quantitative Qualitative, and Mixed Methodologies*. Oxford University Press.

Fraschini, N., & Park, H. (2021). Anxiety in language teachers: Exploring the variety of perceptions with Q methodology. *Foreign Language Annals, 54*(2), 341-364.

Gallagher, K., & Porock, D. (2010). The use of interviews in Q methodology: card content analysis. *Nursing research, 59*(4), 295-300.

Haukås, Å., & Mercer, S. (2022). Exploring pre-service language teachers' mindsets using a sorting activity. *Innovation in Language Learning and Teaching, 16*(3), 221-233.

Hennink, M. M. (2008). Language and communication in cross-cultural qualitative research. In P. Liamputtong (Ed.), *Doing cross-cultural research* (pp. 21-33). Springer.

Irie, K., Ryan, S., & Mercer, S. (2018). Using Q methodology to investigate pre-service EFL teachers' mindsets about teaching competences. *Studies in Second Language Learning and Teaching, 8*(3), 575-598.

Lu, X., & Geng, Z. (2022). Faith or path? Profiling the motivations of multilingual Chinese as foreign language teachers using Q methodology. *Language Teaching Research*, https://doi.org/10.1177/13621688221099079.

Lundberg, A., Fraschini, N., & Aliani, R. (2023). What is subjectivity? Scholarly perspectives on the elephant in the room. *Quality & Quantity, 57*, 4509-4529. https://doi.org/10.1007/s11135-022-01565-9

Patton, M. Q. (1999). Enhancing the quality and credibility of qualitative analysis. *Health services research, 34*(5 Pt 2), 1189-1208.

Peng, J. & Wu L. (2022). Motivational profiles of Chinese university students majoring in Spanish: a comparative study. *Journal of Multilingual and Multicultural Development*. https://doi.org/10.1080/01434632.2022.2035740

Poland, B.D. (1995). Transcription quality as an aspect of rigor in qualitative research. *Qualitative Inquiry, 1*(3), 203-218.

Rolland, L., Dewaele, J.-M., & Costa, B. (2019). Planning and conducting ethical interviews: Power, language and emotions. In J. McKinley & R. Health (Eds.), *The Routledge handbook of research methods in applied linguistics* (pp. 279-289). Routledge.

Ruohotie-Lyhty, M. (2015). Dependent or independent: The construction of the beliefs of newly qualified foreign language teachers. In In P. Kalaka., A. M. F. Barcelos., M. Aro. & M. Ruothotie-Lyhty (Eds.), *Beliefs, agency and identity in foreign language learning and teaching* (pp. 149-171). Springer.

Schostak, J. F. (2002). *Understanding, designing and conducting qualitative research in education: framing the project*. Open University Press.

Shemmings, D., & Ellingsen, I. T. (2012). Using Q methodology in qualitative interviews. In J. Gubrium (Ed.) *The SAGE handbook of interview research: The complexity of the craft* (2nd ed, pp. 415-426). SAGE.

Squires, A. (2009). Methodological challenges in cross-language qualitative research: A research review. *International journal of nursing studies*, *46*(2), 277-287.

Stephenson, W. (1953). *The study of human behaviour*. University of Chicago Press.

Stephenson, W. (1986). Protoconcursus: The concourse theory of communication. Operant Subjectivity, 9(2), 37-58.

Thornberg, R., & Charmaz, K. (2014). Grounded theory and theoretical coding. In U. Flick (ed.), *The SAGE handbook of qualitative data analysis* (pp. 153-169). SAGE.

Watts, S., & Stenner, P. (2012). *Doing Q methodology: theory, method and interpretation*. SAGE.

Weinmann, M., Neilsen, R., & Slavich, S. (2021). Multiculturalism and the "broken" discourses of Chinese language education. In C. Halse. & K. Kennedy. (Eds.), *Multiculturalism in turbulent times* (pp 57-75). Routledge.

Wolf, A. (2014). The interview in Q methodology: Readiness to adopt sustainable responses to climate change. *SAGE Research Methods Cases*. Sage.

Yuan, C., & Lo Bianco, J. (2022). L2 Chinese teachers' beliefs about engagement strategies for students in Australia: Findings from Q methodology research. *System, 106*. https://doi.org/10.1016/j.system.2022.10279

Yuan, C. (2022). Identifying the nature and sources of L2 Chinese teachers' beliefs about how to motivate secondary school students in Australia: A Q methodology study [Doctor of Philosophy, University of Melbourne].

Chapter 8

Overseas returnee teachers' beliefs about bilingual teaching in content-based courses in Chinese universities

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Introduction

In recent decades, the internationalisation of higher education has seen a great emphasis placed on English language education, English as a medium of instruction (EMI), and bilingual education (i.e., using both English and the home language) across the world, and China is no exception (Galloway et al., 2017; Pan, 2011; Ping, 2016). Chinese universities have particularly tended to focus on discipline-specific English education over general English education, particularly in top-tier universities where students' average English language proficiency level is higher, and overseas returnee teachers with desirable discipline-specific English skills are recruited to teach bilingual courses (Hu, 2007; Hu & McKay, 2012). The term "overseas returnee teachers" here refers to Chinese scholars who return to work in Chinese universities after being educated or working in non-mainland higher education systems and use English and/or Chinese for teaching. These returnee teachers have become an indispensable and important part of the bilingual teaching force as they are reintegrated into local institutional and cultural education contexts (Li, 2020). Thus, understanding Chinese overseas returnee teachers' bilingual teaching experiences becomes imperative (Ai, 2019).

A brief review of current literature reveals that existing research on Chinese returnee teachers mainly focuses on areas such as teaching practices and publishing challenges (Curry & Lillis, 2019), international research collaboration (Li, 2020), language use and management in English-medium education settings, and on the interplay between language and identity construction (Du et al., 2022; Xu & Ou, 2022). Nevertheless, there has been relatively a paucity of research on returnee teachers' beliefs regarding bilingual teaching. Beliefs about bilingual teaching in other countries have become an important subject of inquiry in language education (Li, 2013), and most studies have utilised survey (Higareda et al., 2009), interviews (Breen, et al., 2001; Farrell & Kun, 2008; Terra, 2021) or a combination of the two (Krulatz, 2019; Tatzl, 2011). While the use of mixed methods, such surveys and interviews, may provide a deeper

understanding, the complexity of teachers' set of beliefs, especially those of overseas returnee teachers, has been hardly delved into.

To address the aforementioned gap, this study examines Chinese overseas returnee teachers' beliefs about bilingual teaching in content-based courses using Q methodology and follow-up interviews. Q methodology was adopted as it is a particularly useful methodology when investigating a complex and subjective construct like teachers' beliefs. Hopefully, this study will contribute to an in-depth understanding and will open a discussion on the contextual challenges of bilingual teaching in content-based classrooms in non-English-speaking countries.

Bilingual education in China

The terms 'bilingual education' and 'bilingual teaching' more often than not are used interchangeably. 'Bilingual education' refers to instruction in two languages and the use of two languages as media of instruction for part or all of the school curriculum (Edwards, 1994). Baker (1993, 2000) defined bilingual education as 'language as a medium for learning content, and content as a resource for learning languages'. There are many types of bilingual teaching models and the implementation of these models varies significantly from country to country. Models in use include the transitional bilingual teaching model, the two-way or dual bilingual teaching model, the native and second-language teaching side-by-side model, and the developmental bilingual teaching model; however, the content-based bilingual model seems to be one of the most successful, particularly in the Chinese higher education context (Wang, 2020).

The content-based bilingual model is a pedagogical approach similar to the content-based instruction (CBI) model, but with more freedom of using L1 and L2 as a medium to facilitate content learning and L2 language skills. As Brinton et al. (2003) hold, CBI is the combination of specific content with language instruction goals or the concurrent teaching of academic subjects and second language (L2) skills. Regarding the balance of language and content, Ping (2016) points out that many CBI courses adopting the bilingual model in the Chinese context use L2 as the medium for learning subject-specific content, to facilitate a shift from language as subject of learning to language as an instructional medium. However, previous studies have revealed that teachers struggle to balance between use of languages and content teaching (Barnard & Hasim, 2018; Donato, 2016; Hüttner et al., 2013). Therefore, more research is needed to understand teachers' beliefs about the use of languages and the balance of language and content in bilingual teaching, particularly in Chinese education settings. Such studies

would shed light on bilingual teacher training and development, particularly aiming to enhance meaningful interactions between teachers and students, and promote content learning through the use of domain-specific language in L2 (Gu & Lee, 2019; Li, 2018; Mou, 2017).

Teachers' beliefs

A growing body of research investigates teachers' beliefs, attitudes, and perceptions towards bilingual teaching (Fullan, 2007). The term 'teacher beliefs' refers to the unobservable cognitive dimension of teaching, including what teachers know, believe, and think (Borg, 2003). Vygotsky (1978) proposes a definition from a social perspective, arguing that beliefs comprise interrelated inferences regarding how one constructs one's relationship to the world, according to which people will structure their behaviours. In this context, 'beliefs' means the concepts, worldviews and mental models that shape learning and teaching practice (Ernest, 1989; Nazari & Sadegh Bagheri, 2015). In this study, the authors tend to integrate all of these viewpoints, defining teacher beliefs as what teachers know, believe, and think about when making decisions, which are often difficult to observe.

Teachers' beliefs are complex, multifaceted and context-dependent (Basturkmen, 2012; Breen et al., 2001). Previous education and professional experiences, existing conceptions of bilingualism, perceptions of student learning, and interactions with students in class may affect and change teachers' beliefs about content-based bilingual teaching (Lundberg, 2019a; Panzavecchia & Little, 2020).

A number of studies have gathered data on teachers' beliefs about language use in bilingual classes, the significance of bilingual teaching and the balance of content and language in content-based instruction. For example, Macaro (2009) revealed that some teachers felt that the use of the home language (L1) in classroom should be avoided since the goal of bilingual teaching was to provide learners with an immersive language experience; other teachers believed that although the use of only L2 was undoubtedly the best practice, the use of L1 cannot be excluded entirely, and it was sometimes unavoidable. The vast majority of participants in a study by Higareda et al. (2009) believed that L1 had a place in teaching grammar and vocabulary, while more than 90% denied its role in providing instruction and classroom management. Terra (2021) also revealed that teachers regarded L1 as a language students could easily communicate in, allowing them to better express themselves and address class topics more confidently and fluently; students' improved contribution and participation would in turn boost teachers' spirits. Lundberg (2019a) discussed teachers' beliefs about the significance of multilingualism for students. Some teachers believed that multilingualism could

help develop oral expression skills and provide cognitive advantages. Some believed that allowing multilingual students to use all their languages in the classroom could facilitate their learning. Other teachers held the belief that the mastery of multiple languages is seen as a key asset for effective communication and employment. There are also scholars who have discussed the balance between language and content. Some teachers believed that students should actively contribute to class and participate in discussions, while some others thought that learners' focus should be on the topic or the content rather than on the language proficiency, and on expressing a point of view rather than producing correct sentences (Li, 2013). There were also teachers who thought that a key benefit of content-based instruction was the fact that combining language and content instruction helped save valuable teaching time (Krulatz, 2019).

Prior research on Chinese returnee teachers has mainly focused on areas other than bilingual teaching. Overall, very little attention has been paid to overseas returnee teachers in China (Ai, 2019), especially their beliefs about bilingual teaching. Among the few studies that do exist in this area, Li and Edwards' (2013), in their research on several returnee and non-returnee teachers, show that some returnee teachers expressed the aim of making English learning more practical and using it as a tool. They also stated that they would encourage students to practice using English more and have a more student-centred environment in the classroom. Another study explored returnee teachers' confidence in their use of English (Zhang et al., 2022). Some teachers felt more comfortable explaining terms in English since they have never taught in Chinese, while others expressed concerns about using English because they only lived in English-speaking countries as visiting scholars for a short time. They were worried about their ability to teach in English and were concerned about communicating with foreign colleagues. Another teacher was worried about building a relationship with their students due to limited ability to use humour in English. There were also teachers who believed that a student-centred environment did not match the experience of Chinese students, given that the students' language skills were not enough to support it, and they did not have a lot of energy to prepare. Since limited attention has been paid to Chinese returnee teachers' beliefs on bilingual teaching, this study intends to examine Chinese overseas returnee teachers’ beliefs about bilingual teaching in content-based courses.

A Q Methodological Study

Q Methodology

Unlike previous qualitative studies, which have relied on interviews or surveys, this chapter illustrates a Q methodology study on bilingual teachers in higher education in China with the aim of providing insights for policymakers and bilingual teachers.

Q methodology has two main advantages. The first is that it can focus on the whole person and their feelings or views on a certain topic, instead of attempting to break the individual down into a set of variables (Irie et al., 2018). Second, Q methodology classifies teachers' beliefs according to their ranking of the statements analysed through statistical software, instead of depending on the author's subjective cognition (Watts & Stenner, 2005). This allows for the systematic and objective identification and classification of different factors that influence teachers' beliefs, which helps avoid biases that may be introduced by the researcher's personal perspective or assumptions. Additionally, Q methodology can supplement other research methods, such as surveys or interviews, by providing a more nuanced understanding of how various factors interact and influence each other in shaping teachers' beliefs.

Q methodology has been found to be effective in investigating bilingual teachers' beliefs and practices in Western contexts (Lundberg, 2019a, 2019b; Sung & Akhtar, 2017) and Chinese students' motivation of learning foreign languages (Zhang & Du, 2021; Zheng et al., 2020). As limited studies have explored Chinese teachers' beliefs about bilingual teaching using Q methodology, this study aims to utilise Q to answer the following research question: what are overseas returnee teachers' beliefs about bilingual content-based teaching in Chinese higher education?

Research Design

This study adopted Q methodology followed by interviews to understand teachers' beliefs about bilingual teaching. An initial Q sample regarding beliefs was created with 50 items; this was then reduced to 38 items to ensure it captured the most representative beliefs. These items were based on the content-based instruction (CBI) model and the pedagogical practices reported in the literature and observed by experienced teachers in bilingual classes. Within the Q sample items, the expression of *English as medium of instruction courses* is used to provide a more accessible terminology for the teachers, given that they are instructing professional courses in English, and aims to bridge the gap between the theoretical distinctions in the literature and the

real-world experiences of the teachers themselves. A pilot study using these statements was conducted with two professors, respectively from a finance and an economics background, who were invited to give feedback after the Q sorting was finished; based on this feedback, several items were modified. A background survey was also used at the end of the study to understand teachers' learning and teaching experience. Follow-up interviews were conducted with teachers representing each of the identified groups to provide an in-depth understanding of the different types of beliefs (see Yuan, this volume, for more details about integrating interviews in Q methodology studies).

Data Collection

Nineteen teachers were invited to and agreed to participate in the research. All 19 graduated from top domestic or foreign universities, have a deep understanding of the subject and great enthusiasm about teaching and use their mother tongue (Chinese) as their language of daily communication. All work at one of the two top-tier financial universities in Shanghai, and all have experience with bilingual teaching in non-language courses. The authors collected empirical data on teachers' beliefs about bilingual teaching using Q Method Software.

Table 1. Participating teachers' demographics and their factors assignment.

Study Code	Gender	Years of Overseas experience	Overseas countries/regions that studied in	Years of Bilingual Teaching	Department	Factors assignment
1001	Male	7+	Netherlands	5	School of Economics	Factor 3
1003	Female	1	US	4	School of Economics	Factor 1
1005	Female	6	HK	4	School of Economics	Factor 2
1007	Female	6	Canada	3	School of Law	Factor 1
1008	Female	6	US	3	School of Accounting	Factor 1

1011	Male	7+	US	4	School of Economics	Factor 3
1013	Female	7+	US	<1	School of Economics	Factor 2
1014	Female	7+	US	2	School of Law	Factor 1
1015	Male	4	HK	9	School of Statistics	Factor 2
1016	Male	7+	Macau, Singapore	2	School of Statistics	Factor 1
1021	Female	1	UK, US	10+	School of Foreign Studies	Factor 3
1022	Female	7+	UK	9	School of Foreign Studies	Factor 3
1023	Female	2	UK	7	School of Business	/
1024	Male	4	HK	4	School of Foreign Studies	Factor 2
1025	Female	<1	HK	10+	School of Business	Factor 1
1026	Female	1	UK, Australia	10+	School of Business	Factor 3
1027	Female	1	Canada	10+	School of Business	Factor 3
1028	Male	4	UK	10+	School of Business	Factor 1

1029	Male	<1	UK	10+	School of Business	Factor 3

The study had several steps. It was preceded by an introduction and consent page, which asked participants to provide well thought and genuine answers. The task itself was then divided into three parts. The first part was the pre-sorting, during which participants were asked to sort all items into three groups: those they agreed with, those they were neutral about, and those they disagreed with. The second part was the sorting, in which participants placed the three groups of items on the distribution grid labelled from most strongly disagree (most negative value, -5) on the left pole to most strongly agree (most positive value, +5) on the right pole. The last part was a survey to collect personal information on their educational backgrounds and teaching experiences.

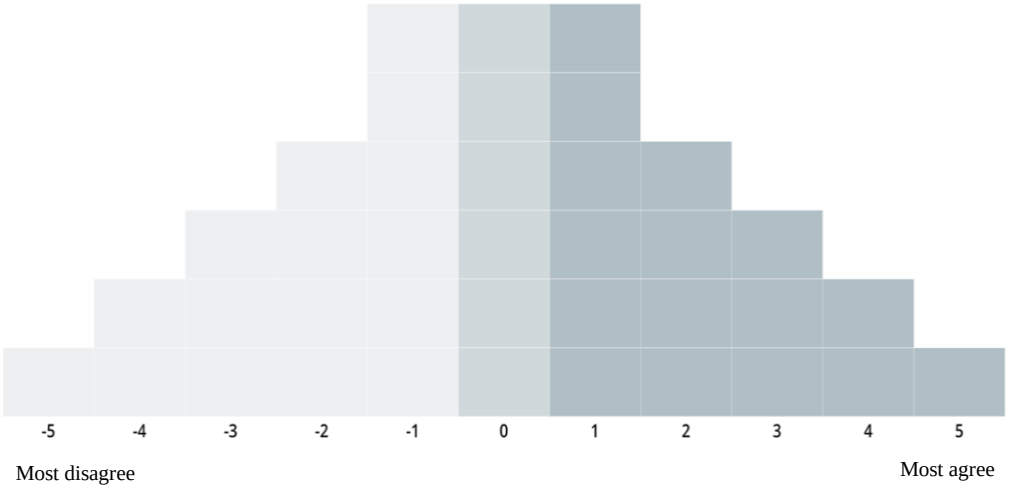

Figure 1 Q sort distribution in Q Method Software for this study

Data Analysis

By using the data analysis function in the Q Method Software, we adopted Centroid factor analysis, which looks for repeated patterns by performing by-person factor analysis (Brown, 1980). The number of factors to adopt was based on two general rules: the Kaiser-Guttman Criterion and the Humphrey's rule. The former indicates that a factor must have an eigenvalue exceeding 1.00 to be retained, while the latter requires the cross-product of the two highest

factors to be greater than twice the standard error. Based on the above rules, a three-factor solution was retained, accounting for 45% of the opinion variance.

The majority of common variance for each sort was considered to ensure that each participant was only significantly loaded on one factor. Brown's (1980) equation was used in the calculation of the significance of Q sorts. In this study, a factor loading of at least ±0.42 was considered significant at the $p < 0.01$ level. Thirteen of the nineteen sorts were loaded significantly on one of the three factors. One respondent's Q sort was not associated with any factor. Seven of the remaining respondents were loaded most significantly on Factor 1, accounting for 31% of the variance; four respondents on Factor 2, accounting for 8% of the variance; and seven respondents on Factor 3, accounting for 6% of the variance. The survey data were also used to help interpret the factors.

Findings

The interpretation of the three factors reveals three corresponding sets of beliefs on bilingual teaching among overseas returnee teachers. Z-scores were calculated to establish the most relevant statements, leading to assigning tags to each factor (Watts & Stenner, 2012). In the qualitative explanations, each individual factor was named for mnemonic reasons (Stenner et al., 2000). For example, (10: -5) indicates that item 10 is ranked in the -5 position in the factor by the average of all participants significantly loading on that factor. Q sort items and their allocated values for each of the three factors can be found in the Appendix. An analysis was also conducted correlating teachers' beliefs with their backgrounds comparing the data with previous studies.

Factor 1: Proactive advocate to enhance students' English communication competence

Based on the first factor, teachers show support for bilingual teaching as a key belief and are more open to different teaching methods in practice.

The main statements related to this factor in terms of an agreement are 33, 30, 20, 18, 26, and 3. Teachers have a clear understanding of bilingual teaching (13: -3) and insist on using English even given a free choice between English teaching and Chinese teaching (30:4), despite the challenges of the class atmosphere (26: 3) and difficulties in explaining material in English (20: 4). At the same time, these teachers believe that bilingual teaching will increase students' employment opportunities (3: 3), and as a result, they pay more attention to students' ability in discipline-specific English (18: 3). In terms of teaching methods, teachers support various teaching methods (30: 4) and prefer lecturing in English (18: 3). Statements representing

disagreement with this factor (lowest Z-score) are 34, 27, 17, 37, 13, 25, which further highlight teachers' aversion to the single teaching method (37: -3) and the extensive use of Chinese in bilingual teaching (17: -4), and also express their opposition to bilingual classroom communication (27: -4) or course examinations (34: -5).

The background of teachers in Factor 1 is very diverse. Most have studied or worked as visiting scholars in European and American countries; only two obtained their overseas experience in Asian countries, namely Macau (China) and Singapore. Regardless of the locations where they have taught, most of these teachers have rich teaching experience. Some have taught for a long time with more than 10 years' experience; some have shorter teaching careers but have taught as many as five bilingual courses; others have experience in courses with large class sizes of 30-60 students.

Factor 2: Sceptical follower confronted with students' resistance to teaching content knowledge through English

Statements showing participants' agreement with this factor (highest Z-score) are 3, 16, 32, 15, 28, 14. This factor is defined by beliefs that are more sceptical of bilingual teaching, and teachers in this group do not actively practice different teaching methods, contrary to factors 1 and 3.

Although these teachers also believe that English should be used more (16: 4), they admit that external factors (15: 3) motivate them to teach English more than their intrinsic motivation (14: 3). Because they lack the motivation to take the initiative in bilingual teaching, they are less likely to adapt their teaching methods to the needs of students. Therefore, they do not perceive themselves as having difficulty in explaining the content in English or spending more time on class preparation. While they are not committed policy advocates and enforcers, they are pragmatists. They perceive problems in current bilingual teaching, such as the lack of training in the English language for students (28: 3) and in bilingual teaching methods for teachers (32: 4).

These teachers' backgrounds are relatively similar. Three of the four teachers in Factor 2 only had overseas experience in Hong Kong (China), while the other studied in the United States and had less than a year's teaching experience there. One of the teachers who studied in Hong Kong has been engaged in bilingual teaching for more than 5 years but has only taught one course in these years. The other three have relatively little teaching experience and have taught 2-3 bilingual courses.

Factor 3: Active explorer with flexible and strategic use of linguistic resources

Teachers in Factor 3 are as supportive of bilingual teaching as those in Factor 1. The difference is that teachers in Factor 3 are more confident in students' and their own English capability, thus promoting bilingual education more thoroughly.

The most relevant statements for Factor 3 are 33, 18, 29, 16, 35, 30, while statements indicating disagreement (lowest Z-scores) are 7, 17, 15, 27, 13, 11. As with Factor 1, Factor 3 also highlights the importance of English (16: 3), the clear goals of bilingual teaching (18: 4), and the necessity of using various teaching methods (33: 5). Differences remain in teachers' perceptions of their English proficiency. In Factor 3, teachers show confidence in their English proficiency, indicating that they do not feel constrained by their English vocabulary and do not feel less able to use humour, the latter of which was a point of concern for teachers in Factor 1 (7: -5). Teachers in Factor 3 are also confident in their students' English capability and thus believe that bilingual teaching classrooms are interactive, and encourage more student interactions in English with teachers and peers (29: 4). At the same time, these teachers' opinion regarding language use in examinations is that English should be used to carry out examinations so as to assess students' professional knowledge level and help them better learn discipline-specific English (35: 3). Thus, they are more confident in English and more likely to conduct courses with the use of multimodal resources.

As for the background of teachers in Factor 3, they share a mutual background that almost all seven teachers have studied in English-speaking countries, including the United States, the United Kingdom, Canada, and Australia. Three of these teachers also have over seven years of overseas study and research experience.

Consensus Statements

Four consensus statements that have similar Z-scores among the three groups are 1, 8, 6, 19. All teachers admit that switching back to Chinese is better for teaching and communicating in bilingual courses, though most would insist on using English in their classrooms on a day-to-day basis. At the same time, teachers in all three factors identify students' comprehension and content expression as a greater priority than language choices and language fluency. This priority means that in the current situation where most Chinese teachers do not speak English as their native language, they will prioritise conveying knowledge clearly and expressing themselves without obsessing over grammar or language. This also confirms the findings that most teachers admit that they have difficulties balancing language and content, and when these challenges emerge, they prioritise content over language (Airey & Linder, 2006; Hu & Lei,

2014). Meanwhile, all groups have a consistent understanding that the purpose of bilingual teaching is to lay the foundation of professional knowledge in English rather than to improve general English ability.

Follow-up interviews with typical teacher cases from each of the three identified groups showed that the implicit nature of language education policy, insufficient institutional support, inadequate teacher training in both languages and teaching methods, and students' conflicting beliefs about language learning pose challenges for returnee teachers' adaptation to bilingual teaching in Chinese tertiary contexts.

Discussion

This study investigated overseas returnee teachers' beliefs about bilingual content-based teaching. We used Q methodology to identify three groups of teachers with specific sets of beliefs: proactive advocates to enhance students' English communication competence; sceptical followers confronted with students' resistance to teaching content knowledge through English; and active explorers with flexible and strategic use of linguistic resources.

We can observe that the three types of teachers in this study generally align with the beliefs of teachers identified in previous research. For those teachers who have relatively negative attitudes towards bilingual teaching, the reasons for their opposition highlight the disadvantages of bilingual teaching mentioned in previous studies, such as teachers' and students' lack of proficiency in English (Zhang et al., 2022) and resulting limitations on knowledge transfer, interaction and class atmosphere (Terra, 2021). Some previous studies can also explain teachers' beliefs in the other two factors. Teachers in both Factor 1 and Factor 3 prefer to teach in English, and teachers in Factor 1 feel the challenges they need to overcome through a series of efforts. Respondents in Factor 1 also support the statement that bilingual teaching improves English proficiency and can provide students with better career prospects (Lundberg, 2019a). Teachers in Factor 3 share a similar belief with previous scholars that they can create an immersive process of English learning by completing all aspects of the course in English and encouraging students to use English as much as possible (Li & Edwards, 2013; Macaro, 2009).

What distinguishes this study from previous research is that the majority of the teachers surveyed demonstrate a high level of confidence in bilingual teaching. This difference may be attributed to the characteristics of the participants, as the study focuses on a specific group of teachers with overseas study experience and generally higher English proficiency. Additionally, all teachers in this study work at top-tier universities in Shanghai, a relatively

developed and highly internationalised city. Other relevant factors may include the fact that the study was conducted in China, where bilingual education has been promoted for over two decades, resulting in relatively mature perceptions towards bilingual teaching and greater access to resources for bilingual teaching. This may contribute to the generally positive beliefs of the teachers in this study. As for those teachers who hold a sceptical attitude towards bilingual teaching, we believe that it may be possible to change their perceptions and attitudes to a certain degree, such as through training. For example, this training should emphasize that bilingual teaching is to encourage better understanding of terminology instead of promoting use of standard English, thus helping teachers in adopting a more positive attitude towards bilingual teaching.

Overall, this study makes a contribution, through the use of Q methodology, to the development of an in-depth understanding of the complexity of Chinese overseas returnee teachers' beliefs about bilingual teaching. Unlike previous qualitative research, Q methodology allows this study to explore sets of beliefs relating to multiple aspects of bilingual teaching, including beliefs on code switching, the balance between content and language, the overall teaching environment and the significance of bilingual education to the students.

Furthermore, the study's findings tend to explore the ongoing changes and existing challenges in bilingual education in China, as the involvement of returnee teachers in the bilingual teaching workforce appears to be a trend in internationalised Chinese universities. Currently, these returnee teachers are more confident in their abilities to teach bilingually than the previous generation of teachers. Their beliefs, as an important part of promoting bilingual teaching, may have positive implications for the future of Chinese bilingual education. This study has extended the research into Chinese bilingual education and can serve as a reference for higher education worldwide that have faced challenges with bilingual education.

Conclusion

Against the background of bilingual education in China, this study explored overseas returnee teachers' beliefs about bilingual content-based teaching. Three sets of beliefs have been identified. Their similarities and differences in terms of beliefs about the relationship between content and language, pedagogical design and assessments, and use of multimodal resources have been discerned and discussed. This study has used Q methodology to capture teachers' beliefs about bilingual teaching, which allows for categorising teachers' beliefs regarding multiple aspects of bilingual teaching. Q methodology is used to offset the limitations of traditional methods such as interviews or questionnaires and to ensure the reliability of the

assessment and classification by considering statistically significant indicators and excluding respondents that are insignificant or significant for multiple factors. Thus, unlike previous qualitative studies, this study helps enrich the research methodology in understanding teachers' beliefs about bilingual teaching.

In addition, this study helps shed light on bilingual teaching in higher education from the perspective of teachers, particularly overseas returnee teachers, and it contributes to an in-depth understanding and open discussion on contextual challenges of bilingual teaching in content-based classrooms as well bilingual teacher development in non-English-speaking countries such as China.

References

Ai, B. (2019). Pains and gains of working in Chinese universities: an academic returnee's journey. *Higher Education Research & Development, 38*(4), 661-673. https://doi.org/10.1080/07294360.2019.1590320

Airey, J., & Linder, C. (2006). Language and the experience of learning university physics in Sweden. *European Journal of Physics 27*, 553-560. https://doi.org/10.1088/0143-0807/27/3/009

Barnard, R., & Hasim, Z. (2018). *English Medium Instruction programmes: Perspectives from South East Asian universities*. Routledge.

Basturkmen, H. (2012). Review of research into the correspondence between language teachers' stated beliefs and practices. *System, 40*, 282–295. https://doi.org/10.1016/j.system.2012.05.001

Baker, C. (1993). *Foundations of bilingual and bilingualism*. Multilingual Matters.

Baker, C. (2000). Three perspectives on bilingual education policy in Wales: Bilingual education as language planning, as pedagogy and as politics. In R. Daugherty, R. Phillips, & G. Rees (Eds), *Education policy-making in Wales: Explorations in devolved governance* (pp. 102-123). University of Wales Press.

Borg, S. (2003). Teacher cognition in language teaching: A review of research on what language teachers think, know, believe, and do. *Language Teaching, 36*(2), 81-109. https://doi.org/10.1017/S0261444803001903

Breen, M., Hird, B., Milton, M., Oliver, R., & Thwaite, A. (2001). Making sense of language teaching: teachers' principles and classroom practices. *Applied Linguistics, 22*(4), 470-501. https://doi.org/10.1093/applin/22.4.470

Brinton, D., Snow, M. S., & Wesche, M. B. (2003). *Content-based second language*

instruction. University of Michigan Press.

Brown, S. R. (1980). *Political subjectivity: Applications of Q methodology in political science*. Yale University Press.

Curry, M. J., & Lillis, T. (2019). Unpacking the lore on multilingual scholars publishing in English: A discussion paper. *Publications, 7*(2), 27. https://doi.org/10.3390/publications7020027

Donato, R. (2016). Sociocultural theory and content-based foreign language instruction. In *Content-based foreign language teaching: Curriculum and pedagogy for developing advanced thinking and literacy skills* (pp. 25–50). Routledge.

Du, X., Tao, J., & Gao, X. (2022). Interplay between language and identity: Chinese returnee scholars in the internationalisation of higher education. *Applied Linguistics Review*.

Edwards, J. (1994). *Multilingualism*. Routledge.

Ernest, P. (1989). The impact of beliefs on the teaching of mathematics. In P. Ernest (Ed), *Mathematics Teaching: The State of the Art* (pp. 249-254). Falmer Press.

Farrell, T. S. C., & Kun, S. T. K. (2008). Language policy, language teachers' beliefs, and classroom practices. *Applied Linguistics, 29*(3), 381-403. doi:10.1093/applin/amm050

Fullan, M. (2007). *The new meaning of educational change*. Teachers College Press.

Galloway, N., Kriukow, J., & Numajiri, T. (2017). *Internationalisation, higher education and the growing demand for Englishes: An Investigation into the English medium of instruction (EMI) movement in China and Japan*. British Council.

Gu, M. M., & Lee, J. C.-K. (2019). "They lose internationalization in pursuit of internationalization": students' language practices and identity construction in a cross-disciplinary EMI program in a university in China. *Higher Education, 78*(3), 389-405. doi:10.1007/s10734-018-0342-2

Higareda, S., López, G., & Mugford, G. (2009). ¿Duermes mucho Tony?: Interpersonal and Transactional Uses of L1 in the Foreign-Language Classroom. *Profile Issues in Teachers` Professional Development, 11*, 43-54.

Hu, G. (2007). The juggernaut of Chinese-English bilingual education. In A. Feng (ed), *Bilingual education in China* (pp. 94-126). Multilingual Matters.

Hu, G., & Lei, J. (2014). English-medium instruction in Chinese higher education: a case study. *Higher Education, 67*(5), 551-567. doi:10.1007/s10734-013-9661-5

Hu, G., & McKay, S. L. (2012). English language education in East Asia: some recent developments. *Journal of Multilingual and Multicultural Development, 33*(4), 345-362. doi:10.1080/01434632.2012.661434

Hüttner, J., Dalton-Puffer, C., & Smit, U. (2013). The power of beliefs: Lay theories and their influence on the implementation of CLIL programmes. *International Journal of Bilingual Education and Bilingualism, 16*(3), 267-284. doi:10.1080/13670050.2013.777385

Irie, K., Ryan, S., & Mercer, S. (2018). Using Q methodology to investigate pre-service EFL teachers' mindsets about teaching competences. *Studies in Second Language Learning and Teaching, 8*(3), 575-598. doi:10.14746/ssllt.2018.8.3.3

Krulatz, A. (2019). Content based instruction in teacher education: Re-shaping pre-service teachers' beliefs about language teaching. *ELTED Journal, 22*, 9-16.

Li, D., & Edwards, V. (2013). The impact of overseas training on curriculum innovation and change in English language education in Western China. *Language Teaching Research, 17*(4), 390-408. doi:10.1177/1362168813494124

Li, L. (2013). The complexity of language teachers' beliefs and practice: one EFL teacher's theories. *The Language Learning Journal, 41*(2), 175-191. doi:10.1080/09571736.2013.790132

Li, Y. (2018). Disciplinary discourse and English teachers' EMI teaching competence. *Technology Enhanced Foreign Language Education,* year 2018/01, 48-53.

Li, Y. (2020). Do returnee faculty promote the internationalization of higher education? A study based on the "2014 faculty survey in China". *Chinese Education & Society, 53*(3), 115-133. doi:10.1080/10611932.2020.1791543

Lundberg, A. (2019a). Teachers' beliefs about multilingualism: findings from Q method research. *Current Issues in Language Planning, 20*(3), 266-283. doi:10.1080/14664208.2018.1495373

Lundberg, A. (2019b). Teachers' viewpoints about an educational reform concerning multilingualism in German-speaking Switzerland. *Learning and Instruction, 64*, 101244. doi:https://doi.org/10.1016/j.learninstruc.2019.101244

Macaro, E. (2009). Teacher use of codeswitching in the second language classroom: Exploring 'optimal' use. In T. Miles & D.-O. C. Jennifer (Eds.), *First Language Use in Second and Foreign Language Learning* (pp. 35-49). Multilingual Matters.

Mou, P. (2017). The present situation and inspiration of EMI in universities under the background of globalization. *China Higher Education Research,* 2017/09, 99-104.

Nazari, A., & Sadegh Bagheri, M. (2015). Teachers' opinions and practices regarding reading comprehension classes. *Journal of Studies in Learning and Teaching English, 4*(1), 37-

64.

Pan, L. (2011). English language ideologies in the Chinese foreign language education policies: A world-system perspective. *Language Policy, 10*, 245-263. doi:10.1007/s10993-011-9205-8

Panzavecchia, M., & Little, S. (2020). Language use in the primary classroom: Maltese teachers' views on multilingual practices. *EuroAmerican Journal of Applied Linguistics and Languages, 7*(1), 108-123. doi:10.21283/2376905X.11.184

Ping, W. (2016). Understanding bilingual education: an overview of key notions in the literature and the implications for Chinese university EFL education. *Cambridge Journal of Education, 47*, 1-18. doi:10.1080/0305764X.2015.1118439

Stenner, P., Dancey, C., & Watts, S. (2000). The understanding of their illness amongst people with irritable bowel syndrome: A Q methodological study. *Social science & medicine (1982), 51*, 439-452. doi:10.1016/S0277-9536(99)00475-X

Sung, P., & Akhtar, N. (2017). Exploring preschool teachers' perspectives on linguistic diversity: A Q study. *Teaching and Teacher Education*, 65, 157-170.

Tatzl, D. (2011). English-medium masters' programmes at an Austrian university of applied sciences: Attitudes, experiences and challenges. *Journal of English for Academic Purposes, 10*(4), 252-270. https://doi.org/10.1016/j.jeap.2011.08.003

Terra, S. E. L. (2021). Bilingual education in Mozambique: a case-study on educational policy, teacher beliefs, and implemented practices. *International Journal of Bilingual Education and Bilingualism, 24*(1), 16-30. https://doi.org/10.1080/13670050.2018.1441803

Vygotsky, L. (1978). *Mind in society: Development of higher psychological processes*. Harvard University Press.

Xu, J., & Ou, W. A. (2022). Facing rootlessness: Language and identity construction in teaching and research practices among bilingual returnee scholars in China. *Journal of Language, Identity & Education*, 1-16. https://doi.org/10.1080/15348458.2022.2060228

Wang, P. (2020). A case study of translanguaging phenomenon in CBI classes in a Chinese university context. *International Journal of Applied Linguistics, 31*. https://doi.org/10.1111/ijal.12324

Watts, S., & Stenner, P. (2005). Doing Q methodology: theory, method and interpretation. *Qualitative Research in Psychology, 2*, 67 - 91.

Watts, S., & Stenner, P. (2012). *Doing Q methodological research: Theory, method and*

interpretation: SAGE.

Zhang, B., Mittelmeier, J., Lomer, S., & Lim, M. (2022). Mismatched expectations of internationalisation: Lived experiences of Chinese returnee academics. *International Journal of Chinese Education*, *11*(3). https://doi.org/10.1177/2212585X221139298

Zhang, H., & Du, X. (2021). English learning motivation types of English majors and its influencing factors. *Contemporary Foreign Languages Studies, 21*(6), 105-118. https://doi.org/10.3969/j.issn.1674-8921.2021.06.011

Zheng, Y., Lu, X., & Ren, W. (2020). Tracking the evolution of Chinese learners' multilingual motivation htrough a longitudinal Q methodology. *The Modern Language Journal, 104*(4), 781-803. https://doi.org/10.1111/modl.12672

Appendix

Statements and factor arrays.

No.	Statement	F-1	F-2	F-3
1	English as medium of instruction courses is mainly for students to lay the foundation of professional knowledge in English.	1	2	2
2	English as the medium of instruction courses is mainly for students to improve English ability.	-1	-3	-1
3	English as the medium of instruction courses is to prepare students for future employment in multinational companies/further overseas study.	3	5	1
4	Students have more ways to learn professional knowledge in English and Chinese, rather than through English as the medium of instruction courses.	0	-1	1
5	English as the medium of instruction course increases the difficulty of teachers' English expression.	-1	-2	-1
6	Switching back to Chinese helps me better teach and communicate during English as the medium of instruction courses.	-1	0	-1
7	I'm constrained by my English vocabulary in English as the medium of instruction courses.	-1	-2	-5
8	I focus more on the delivery of content rather than the use of language.	1	1	2

9	Young teachers with overseas doctoral education experiences should be the main body undertaking English as the medium of instruction tasks.	0	0	-1
10	Students usually have higher expectations on teaching quality in English as the medium of instruction courses.	0	-2	0
11	I am experiencing the process from English as the medium of instruction teaching to Chinese teaching in my class.	-2	-3	-3
12	I find my attitude towards English as the medium of instruction changing from being supportive to less supportive.	-2	-1	-2
13	I am confused with the objectives of English as the medium of instruction courses.	-3	-1	-3
14	I was assigned to do English as the medium of instruction by the school rather than I chose to teach English as the medium of instruction course.	-2	3	-2
15	My choice to teach English or Chinese medium instruction classes will be subject to the incentives or relevant preferential policy offered by the university.	1	3	-4
16	Chinese is only a supplement to English in English as the medium of instruction courses, where English is a dominant language of instruction.	2	4	3
17	Chinese is my main language of instruction in English medium instruction courses, though English textbooks or slides are provided.	-4	-4	-4
18	I try to speak English as much as possible to ensure my students learn more discipline-specific English in my class.	3	0	4
19	I adjust the proportion of English usage to the extent my students can understand.	1	2	1
20	When encountering difficulties in explaining, I tend to slow down and repeat English rather than switch to Chinese.	4	1	-2
21	I reduce the output of content when I lecture in English.	-1	-5	-1
22	I reduce the difficulty of contents in English as the medium of instruction courses.	-1	-4	0
23	I need longer preparation for PPT (terminology, reading materials, etc.) in English as the medium of instruction courses	0	-3	-1

24	I use Chinese when specific expressions related to China occur.	0	2	1
25	I deliberately use different languages in PPT presentations and class delivery to enhance the efficiency of student understanding.	-3	2	1
26	I have less chance to tell jokes and have casual talks when I teach in English.	3	-1	0
27	My students are encouraged to choose the language they are comfortable with, either in class or for homework.	-4	1	-3
28	It is important to students with English as medium of instruction learning difficulty to do more training in discipline-specific English.	2	3	1
29	More student interactions in English with teachers and peers should be encouraged in class.	2	1	4
30	I have great freedom in choosing the teaching style and language use of English as the medium of instruction courses.	4	0	3
31	I am not sure which English as the medium of instruction teaching style (English-focused/Chinese- focused/balanced) is better for teaching.	-2	-2	-2
32	More training on English as the medium of instruction teaching methods is needed for teachers.	1	4	0
33	Various teaching methods, such as case-study, problem-based learning, or project-based learning should be utilised in English as the medium of instruction courses to enhance both content and language learning.	5	1	5
34	Assessments are used in either English or Chinese to check students' development in conceptual understanding and higher-order thinking.	-5	-1	0
35	English is the only language for assessments to ensure the development of content understanding and discipline-specific English proficiency levels.	1	0	3
36	I keep trying new methods every year to encourage students to use English in my class.	2	-1	2

37	I prefer using lecture-based instruction in English as the medium of instruction courses because students lack the ability to discuss in English.	-3	1	0
38	I use lecture-based instruction in English as the medium of instruction courses to enhance the efficiency of course delivery as my teaching focuses on content.	0	0	2

Part 3

Q methodology to evaluate language educational policies and programs

Chapter 9

Q evaluation: Potential applications in language education

Athip Thumvichit

Introduction

Defined as "the methodical examination of a program's operations and/or outcomes, judged against a set of explicit or implicit standards, aimed at enhancing the program" (Weiss, 1998, p. 4), program evaluation has gradually diffused across various disciplines, and education is no exception. Within the sphere of education, program evaluation plays a crucial role in facilitating curriculum enhancement, addressing student needs, and monitoring the teaching process (Cronbach, 2000; Oermann et al., 2018). Its central goal is to augment the quality of students' learning encounters (Lam, 2016). Evaluation is consistently employed to delineate the value and limitations of educational systems, methodologies, programs, and innovations, serving as critical tools in documenting the effectiveness of different facets of the educational landscape (Sink & Lemich, 2018). Data from program evaluation is often viewed as a guiding resource in informing policy decisions and strategic planning.

Much like any academic program, language programs, which are designed to meet specific societal needs related to language acquisition and use, present an ever-evolving array of factors that contribute to transforming individuals' lives (Norris, 2016). That is, curriculum designers, instructors, administrators, policy makers, and the general public have a shared interest in discerning the ideal in the quest for educational advancement and societal improvement. Despite this, much of the existing research in the field of language teaching and learning does not fully address the intricacies inherent in educational and programmatic contexts. It often falls short in presenting its findings in a manner that can be directly and conveniently applied to the decisions that need to be made (Norris, 2016). Language program evaluation—a systematic collection and analysis of information necessary to improve a curriculum, assess its effectiveness and efficiency, and determine participants' attitudes within the context of a particular institution (Brown, 1995)—offers a structure, guiding principles, and techniques for understanding the context of language teaching, learning, and other related activities. It also aids in addressing the question of 'what is best' and provides insights for practical enhancement efforts. Despite its considerable potential, there remains a noticeable

gap in the incorporation of program evaluation within applied linguistics research and practice. This lack of intersection is surprising, considering that both fields share common goals in enhancing teaching and learning. In applied linguistics, practical solutions are sought for problems in real-world language use. Similarly, program evaluation aims to improve the effectiveness of educational programs. These shared objectives underline the potential for a beneficial crossover of methodologies and approaches between these two fields.

In this chapter, I explore and deliberate upon the potential applications of Q methodology (Q) in language program evaluation—an emerging discipline in applied linguistics—for quality management and research purposes. Most program evaluations rely largely on data from a Likert scale (Brewer-Deluce et al., 2020). However, it is not without its limitations. First, Likert scales are often administered as a standard procedure across various departments, faculties, or institutions. Consequently, they may lack course specificity and potentially fail to accurately represent or address the concerns most relevant to students (Brandl et al., 2017). Second, Likert scales are used to generate ordinal data, and thus possess an inherent assumption that might not hold true. The intervals between ratings cannot be considered equal (e.g., between *satisfied* and *very satisfied* or *dissatisfied* and *very dissatisfied*). This presumption can potentially introduce a systematic error or bias in the design and subsequent analysis of program evaluations (Kiger, 2017). Third, measures of central tendencies are often used to interpret data, yet mean or median satisfaction values, for instance, may not reflect the diversity and subjectivity of the student experience (Steyn et al., 2019). Finally, although open-ended survey responses appended to Likert scales may provide "a rich description of respondent reality", they are limited in that there is a chance that some respondents find questionnaire items irrelevant (Jackson & Trochim, 2002).

Therefore, there is a need for a more holistic and robust method of program evaluation to allow instructors and program administrators to assess and cater to the diverse needs of students (Brewer-Deluce et al., 2020). The application of Q in program evaluation remains insufficiently explored and incorporated in scholarly conversations and operational procedures. Given its ability to delve into subjective experiences and perspectives, Q deserves more rigorous exploration and broader application in program evaluation and applied linguistics. The purpose of this chapter is to introduce how Q can be used to evaluate language programs. This chapter is structured as follows. First, I provide an overview of program evaluation in language education as an emerging field in applied linguistics. The following section is meant to delve into previous applications of Q in evaluating education programs. This is followed by practical steps in using Q for language program evaluation. Strengths of Q are then discussed in relation

to its capacity for capturing diverse viewpoints and its potential for facilitating program improvement. I then present potential applications of Q for language program evaluation. Lastly, I summarise the key points discussed in the chapter, with some recommendations for those who are new to Q.

Language program evaluation

The concept of evaluation holds various meanings in language education (Kiely & Rea-Dickins, 2005). For language teachers, evaluation serves as a crucial component of their developmental toolkit. In its simplest form, it guides lesson planning, informs teaching approaches, addresses learning outcomes, and determines student satisfaction. Its explicit definition was proposed by Norris (2016): "language program evaluation is a pragmatic mode of inquiry that illuminates the complex nature of language-related interventions of various kinds, the factors that foster or constrain them, and the con- sequences that ensue" (p. 169). Similar to conventional program evaluation (in terms of practice), language program evaluation came into prominence during the 60s. Since its inception, it has undergone numerous stages of development, both in terms of practical application and scholarship. Norris and Watanabe (2012) classify the evolution of language program evaluation into three distinct phases. The initial phase, referred to as the *prescholarly* phase, saw the application of language program evaluation primarily in the form of large-scale experimental research. At that time, its objective was twofold: to validate the effectiveness of teaching methods (Smith, 1970) and to oversee the progress and performance of language programs (Beretta & Davies, 1985).

The second phase marked the beginning of language program evaluation as a recognized field of study. In this phase, practitioners established a new domain within applied linguistics, incorporating several key ideas, such as the importance of understanding of language program implementation in addressing the quality of language programs, the role of program stakeholders as a source of in-depth insights into how language programs function, and the centrality of the purposes of evaluations in the process, rather than methodological choices (Norris & Watanabe, 2012). With these in mind, research efforts in language program evaluation became more pronounced during this phase. The focus of these efforts was diverse such as data collection methods (e.g., observation guidelines, interviews, tests), frameworks for scrutinising various aspects of language programs (e.g., connection between program evaluation and learners' needs, curriculum, and teachers), and the involvement of stakeholders. The gradual shift from evaluating specific program outcomes to assessing the actual curricular experience has created a complex task for evaluators. This transition necessitates a broader and

more holistic approach to evaluation, one that takes into account not just the outcomes but also the process and context of language learning. That is, various outcome constructs have been employed. For instance, syllabus specifications have been used as a measure of program outcomes (Munby, 1978). These specifications outline the content and objectives of the language program, providing a clear standard against which the program's outcomes can be evaluated. Project frameworks have also been used in language program evaluation (Nuttall, 1991; Alderson, 1992). These frameworks provide a comprehensive view of the language program, encompassing not just the content but also the teaching methods, learning activities, and assessment procedures. By evaluating the program against these frameworks, evaluators can gain insights into the effectiveness of the program as a whole, not just its outcomes.

In the third phase, language program evaluation is perceived as part of an "accountability movement". This phase draws from various domains, including compulsory testing in subject areas, assessment of learners' outcomes as a key element of institutional accreditation, global proliferation of policies and standards in program evaluation, and quality assurance conducted by external panels. For example, a range of language competence constructs have been used to generate tests that serve a function of program evaluation. These constructs define the different aspects of language competence that the program aims to develop. Tests based on these constructs can provide a measure of the program's effectiveness in developing these competences (Greenwood, 1985). These trends of evaluation in language education can be seen in a global context. The latest wave of research in this field has aimed to go beyond simply sharing case studies of evaluation in practice. It has sought to provide a platform for reflections on the practical application of evaluation, as well as empirical findings derived from these applications (Norris, 2016).

Kiely and Rea-Dickins (2005) highlight several ways in which program evaluation shapes language education. At the classroom level, program evaluation has facilitated attention to language learning and instructional effectiveness issues. For instance, advancements in discourse analysis within the field of applied linguistics have paved the way for the development of systematic approaches to document and research classroom interactions. Through discourse analysis, evaluators can examine the language used in the classroom, the interactions between students and teachers, and the social dynamics that influence learning. This can provide valuable insights into the communicative practices in the classroom and their impact on language learning. Ethnographic strategies have also been used to gain a better understanding of the cultural, identity, and affective factors that influence language programs and determine their effectiveness. By examining these broader social and cultural factors,

evaluators can gain a more holistic understanding of the language learning environment. This can inform the development of more culturally responsive and inclusive language programs, contributing to the overall effectiveness of language education.

Program evaluation is also understood as a domain of professional practice among language teachers. The qualifications and expertise required for language program evaluators have evolved in tandem with developments in general educational evaluation. In the past, when the focus of evaluation was primarily on measuring outcomes, evaluators were viewed as assessment specialists, whose expertise did not necessarily encompass the full spectrum of components involved in a language program (e.g., management, administration, training). The evolution of programs, with its inherent collaboration with practitioners, has led to the creation of a somewhat different role for the external evaluator. This new role can be described as that of an evaluation consultant or trainer. This role was exemplified by the Project Development and Support Scheme (PRODESS) of the British Council. Within the context of various English language education programs in Eastern and Central Europe, PRODESS provided a suite of training and support services to programs and institutions, with the aim to utilise evaluation as a tool for development (Kiely et al., 1995). In addition, program evaluation contributes to the growth of *formative* approaches. Traditional summative evaluations have been supplemented by formative evaluations. The PRODESS Guidelines (Kiely et al., 1995) detail methods for conducting these evaluations, serving dual purposes: they function as a strategy for program management and contribute to external or summative evaluations.

Q in program evaluation research

Over the past few decades, Q has been used to study human subjectivity across disciplines, and education and program evaluation are no exception. The idea of incorporating Q in program evaluation has been put forth, with the main aim to boost genuine stakeholder involvement (Harris et al., 2021). This is achieved by identifying and categorising the needs of stakeholders, implicit theories of the program, and evolving perspectives on a matter (Harris et al., 2019; Ramlo, 2011). When there is a need to refrain from predicting the direction of program effects, Q is recommended for use in any educational program (Redburn, 1975) as "an effective evaluative research tool for measuring the degree of agreement and diversity of student perceptions of the curriculum" (Green & Stone, 1977, p.172).

Using Q to evaluate programs offers unique data that diverges from the results of other methods. It empowers stakeholders to voice their opinions about a program and prioritise its features based on their personal preferences. In contrast, traditional program evaluations (e.g.,

Likert-type evaluations) tend to focus on summarising students' overall views about a program, often neglecting individuals' preferences (Byram et al., 2020). Traditional program evaluations also do not account for the importance of all program components being evaluated (Jurczyk & Ramlo, 2004; Brandl et al., 2017). That is, with a narrow range of items (or questions), traditional program evaluations can fail to address individuals' perceptions. For instance, written responses to a limited number of questions may result in inconclusive data that do not holistically emphasise every facet of the program being evaluated.

Alternatively, Q has been applied by program evaluators to boost the quality of evaluation. It is used to capture diverse perceptions and experiences of stakeholders regarding performance measurement systems and the subsequent use of data (de Jonge et al., 2017; Militello et al., 2013), leading to divergent priorities for reconciliation (Harris et al., 2021). Growing educational research has successfully applied Q in course and program evaluation. For example, Jurczyk and Ramlo (2004) employed Q to conduct a sequence of evaluations for several undergraduate chemistry and physics courses over multiple semesters, focusing on various key components of the courses such as teachers, overall structures, and laboratories. Even though their evaluations were confined to a small group of students, they effectively showcased the potency of Q as a tool for holistic course evaluations. Another example is Brewer-Deluce et al.'s (2020) study. They noticed that regular course evaluations did not help improve the quality of an undergraduate anatomy course, as only positive feedback was given and written responses to open-ended questions were not constructive. For these reasons, Q was used as a supplement to conventional methods, allowing them to gather useful information such as students' preferences concerning different aspects of the course (i.e., lectures, laboratories, and tutorials). This led to the need to improve specific aspects of the course. Similarly, Collins and Angelova (2015) conducted a Q evaluation of learning activities in a language teaching methodology course. The results revealed three distinct perspectives: a preference for learning through group activities, a preference for independent work, and a preference for learning from online activities. Although the authors argue that these findings were less likely to be uncovered through traditional Likert surveys, it is important to note that Q is not intended to replace traditional program evaluations. Instead, it is proposed as a complementary approach. Its potential to generate valuable data and distinguish clusters of students with shared opinions makes it a powerful tool for refining program improvement strategies. Apart from its potential benefits in developing and improving programs, Q can present a valuable catalyst for discussion with stakeholders (Oring & Plihal, 1993). It allows them to reflect on various facets of the program, fostering a deeper understanding and encouraging constructive feedback. This

interactive process can lead to more informed decision-making, collaborative problem-solving, and ultimately, more effective program development and implementation.

However, Q is more commonly used for evaluation by researchers rather than practitioners (Yang & Xu, 2021) who share several commonalities, primarily centred around their mutual goal of addressing a question. Differentiating between the two domains is vital. Research aims to expand our understanding of a specific topic, and the credibility of the researcher can be undermined by subjective opinions (Levin-Rozalis, 2003). The objective of evaluation fundamentally revolves around improving a program for a specific group of people, contrasting with research, which aims to validate a theory or hypothesis (Beney, 2011). As stated by the United Nations Evaluation Group (2016), "an evaluation is expected to yield reliable and actionable evidence-based data, allowing for the swift integration of its conclusions, suggestions, and learned experiences into the decision-making procedures of organisations and relevant parties" (p.10). Put simply, evaluation is meant to improve, not to prove (Stufflebeam, 1983). Therefore, the intent of this chapter is to familiarise educational practitioners with Q as an evaluative tool, with the ultimate objective of improving programs. The subsequent sections of this chapter are dedicated to providing an introduction to practical guidelines for applying Q in language program evaluation.

Proposed guidelines for applying Q in language program evaluation

Language programs represent diverse educational practices that are often highly complex, and evaluators typically draw upon their personal experiences during the evaluation of these programs. When it comes to language education, given the limited availability of domain-specific measures and the wide range of evaluative knowledge among practitioners, the necessity to better grasp the viewpoints of evaluators and practitioners should be addressed. Q is well-suited for the evaluation of language programs which, like that of other educational programs, involves diverse stakeholders to discern interconnected themes across various viewpoints, and holds the potential to tackle issues regarding the social validity of evaluative tools (Rodl et al., 2020). Before proceeding, I would like to clarify the term "language programs" to which these guidelines are intended to apply. Language programs can mean a broad spectrum of educational programs and courses, from specific language courses (e.g., general language, language for specific purposes, language training courses/programs) to English-medium instruction programs (EMI), and even less formal tutoring programs.

To perform an effective evaluation via Q, practitioners need to establish a series of systematic evaluative statements, construct open-ended questions that correspond with the

purpose of evaluation, execute Q sort activities, analyse the collected data, and interpret the outcomes (Yang & Xu, 2021). In adherence to best practices in evaluation and existing literature, I propose a six-step process for Q evaluation. These include: defining the purpose of evaluation; identifying the stakeholders; developing the Q sample; administering the Q sort; data analysis, and interpretation. Due to the scarcity of Q research on language program evaluation, the demonstration will be primarily guided by literature from the broader field of education.

Defining the purpose of evaluation

Needs analysis as part of program planning and evaluation efforts aids educational programs in fulfilling growing demands for accountability (Marrs & Helge, 1978). To perform needs analysis, evaluators can formulate and pose a series of questions to relevant stakeholders. These questions are designed to pinpoint areas of need and to understand how the evaluation can help address it. For example, in the context of evaluating programs in higher education, evaluators may conduct surveys or interviews with lecturers, program administrators, or institutional directors. They can ask questions such as, *Why do you need to evaluate the program?*, *How can you improve your program?*, and *Are there any aspects of the program that you want to improve?* The onset of Q evaluation is grounded in the basic tenets of program evaluation, aiming to determine what strategies were effective, for whom they were effective, in what situations, and why, all in the context of practitioners' experiences with the capacity building framework (Harris et al., 2019). One thing that all evaluators should keep in mind is that the goal of program evaluation varies from institution to institution and can change over time. While some institutions may focus on national standards and benchmarks in their program evaluations, others may prioritise addressing specific student needs, such as enhancing language proficiency. In some cases, institutions may need to shift their focus rapidly in response to unexpected situations, like the COVID-19 pandemic, which has required a swift transition to online learning and a re-evaluation of student engagement strategies.

The construction of program theory in Q evaluation is a crucial step, as both focus on context rather than content (Harris et al., 2019). Pawson (2013) breaks down context into four distinct layers: (1) individuals (e.g., characteristics), (2) interpersonal relations (e.g., relationships between stakeholders), (3) institutional settings (e.g., institutional regulations), and (4) infrastructure (e.g., economic conditions). Defining the context of the program allows evaluators to address the circumstances, boundaries, and backgrounds of the program, which will contribute to all other stages of the program evaluation.

Developing a Q sample

Developing a Q sample is probably the most challenging step in Q evaluation. This step necessitates that evaluators delve into crucial contextual factors, concerns, or issues that influence the program (Harris et al., 2019), and subsequently construct a *concourse*. Given that the previous step has equipped evaluators with comprehensive information about the program under evaluation, they are now in a position to construct the concourse based on this information. The concourse represents the broadest spectrum of perspectives on the topic (Brown, 1980). This step facilitates a more profound understanding of the intended objectives of the evaluation (Harris et al., 2019). Oring and Plihal (1993) proposed four conceptual areas that guide the construction of a Q sample in Q evaluation: Curriculum (learning objectives and supervised practice), Program (planning and evaluation), Instruction (teaching style and procedures), and Interpersonal relations (student-teacher and peer). That is, the generation of statements is steered by one (or more) of these areas. For example, if the domain of interest is effective language teaching for migrant students (Instruction), The evaluator is expected to identify indicators of effective language teaching from various resources, such as empirical literature, official documents (e.g., national guidelines for language teaching), and teacher evaluation systems (e.g., Charlotte Danielson's Framework for Teaching). If the domain of interest is EMI, the evaluator can utilise Bradford's (2016) conceptual framework for identifying challenges in EMI programs. This framework emphasises four key components on which the evaluator could focus: language, culture, structure, and institution. Therefore, the construction of the concourse should cover all these components rather than a single component, if the goal is to capture a holistic view of the program.

Once the key components of the program have been identified, the evaluator can now proceed to generate statements. In line with typical Q research, the evaluator generates as many statements as possible, but each statement should correspond to one of the focused components. This might involve drawing from interviews with stakeholders, reviewing previous research, conducting observations, or incorporating the evaluator's personal experience. The statements generated at this stage are subject to validation. They can be validated in three ways: first, within the evaluation team; second, by a small sample of practitioners involved in the program under evaluation; and third, by external experts. The validation of statements may focus on simplicity, clarity, relevance, and avoidance of repetition. Simplicity and clarity ensure that the statements are easy to understand. Relevance checks that the statements are pertinent to the program under evaluation. Avoidance of repetition ensures that each statement is distinct from

the others. As far as the number of statements is concerned, it is important to generate enough statements to adequately represent the domain, but an excessive number can make the sorting process overly complex (Thumvichit, 2022). Q research often involves a Q sample of between 40 and 80 (Stainton Rogers, 1995), but these numbers should be considered as a general guideline rather than a strict rule.

Obtaining a P sample

The diversity of participant cohorts underscores the versatility of Q which is applicable to all members within an educational setting as it does not impose restrictions based on age or verbal comprehension (Lundberg et al., 2020). This inclusivity allows for a broader range of viewpoints to be captured, enriching the depth and breadth of program evaluation. Whether they are students, instructors, program administrators, institutional directors, or support staff, everyone's viewpoint can be considered. A simple question is, *Can they express their thoughts on the dimensions of the program under evaluation?* If the answer is "yes", they can participate in the evaluation. The P sample is not randomly selected, rather it is a strategically structured sample of participants who are theoretically relevant to the area under research (van Exel & De Graaf, 2005). Going back to the evaluation of EMI programs, the potential participants might include students, instructors, and program administrators. Given that different groups of students (e.g., 1st, 2nd, 3rd year) and instructors (e.g., native English speakers, non-native English speakers) are likely to have different experiences with the program, it is appropriate for participant selection to be guided by theoretical considerations (e.g., purposive sampling) rather than pragmatic ones (e.g., convenience sampling). On the other hand, if the evaluator is interested in examining the management aspects of the program (e.g., course structures, institutional policies) in addition to teaching and learning aspects, it would be appropriate to include program administrators in the Q sample (see Aliani, this volume). However, if the objective is to evaluate specific courses within the program, it would be appropriate to recruit groups of students who are currently enrolled in those courses and teachers who are instructing those courses, as they are best positioned to express their thoughts (see Park, this volume). While stakeholders included in Q evaluation are often program participants, there are instances where support staff are also recruited so as to identify and compare viewpoints on the program across different stakeholder groups (Harris et al., 2021).

With its by-person factor analysis, like typical Q research, Q evaluation can be effectively administered with a small sample. While some Q methodologists recommend a P sample of between 40 and 60 (Brown, 1980; Stainton Rogers, 1995) or a 1:1 ratio of statements

to participants (Dziopa & Ahern, 2011), these figures are just a rule of thumb (Watts & Stenner, 2005). Many researchers involved far fewer participants than the number recommended and still found Q evaluation effective (e.g., Brewer-Deluce et al., 2020; Collins & Angelova, 2015; Harris et al., 2019; Ramlo, 2015). In Harris et al.'s (2019) program evaluation, for example, only 15 individuals participated; however, this sample constituted a complete representation of all those who participated in the program. Who the participants are is of greater importance than how many there are (Brown, 1978).

Administering a Q sort

Once the Q sample and P sample are finalised, the evaluator can proceed with the Q sort procedure. A Q sort can be administered in various ways depending on the purpose of the program evaluation. In summative program evaluation, the simplest design involves conducting a single Q sort at the end of a semester. This approach allows participants to reflect on their experiences with a specific course throughout that semester, much like traditional evaluations that are administered at the completion of each course. However, this design does not enable the evaluator to assess the overall quality of the program, any interventions, or the dynamic nature of participants' views. On the other hand, in formative program evaluation, the Q sort can be administered at multiple points throughout the program. This approach allows for ongoing feedback and adjustment, providing a more dynamic and responsive evaluation. It enables the evaluator to track changes in participants' views over time, assess the impact of specific interventions, and gain a more comprehensive understanding of the program's effectiveness. For example, Jurczyk and Ramlo (2004) conduct a sequence of Q evaluations for several undergraduate chemistry and physics courses over multiple semesters. Conducting the Q sort throughout a course helps the evaluator to understand the shifts in participants' views and experiences over the semester. With appropriate interventions (e.g., modifications to the teaching process), this approach also allows the evaluator to examine any changes in the course quality from the participants' perspectives.

Having a Q sort administrator, who does not directly interact with participants, can be advantageous as it allows the administrator to assist students by reviewing their ongoing evaluation without compromising the relationship between the evaluator and participants. This impartial role of the administrator can foster an environment where students feel more at ease expressing their true thoughts and experiences, leading to more accurate and authentic evaluations. If instructors themselves serve as evaluators, students (as participants) may feel pressured to provide positive feedback or withhold criticism, which could skew the results of

the evaluation.

Analysis and interpretation

Like typical Q research, Q evaluation involves conducting a factor analytic procedure, typically executed using a dedicated Q application such as PQMethod (Schmolck, 2014) or Ken-Q Analysis Desktop Edition (KADE) (Banasick, 2019). This process commences with factor extraction, where Q sorts are correlated with each other by comparing the placement of each statement by different participants. Participants who arranged statements in similar ways will show high positive correlations.

The interpretation should highlight the distinct narratives underlying the Q sort patterns, based on their similarities and differences. The interpretation often coincides with decisions on which factors to retain and rotate (Baker et al., 2006). This process is iterative, requiring evaluators to consider Q sort patterns in relation to existing theories and specific properties that link factors. It is common for evaluators to rely on factor arrays, rather than factor loadings, which are often referred to in traditional factor analysis. Attention is first given to the statements at the ends and in the middle of the continuum. Evaluators then look across the factor arrays for the statements that distinguish or represent shared viewpoints between factors. Other features deserving of attention include discrepancies between the factor arrays and substantial variances in interpretation across the factors. It is critical to refer to relevant demographic profiles and post-sort interview data in the narratives since they can help explain the subjectivity. Evaluators are encouraged to consider its contribution to the overall profile and whether it supports or contradicts the subjectivity (Watt & Stenner, 2012). The narratives are constructed around diverse subjective viewpoints, drawing comparisons with each stakeholder's role and context within the program. This helps evaluators understand the different ways the program functioned in relation to the diverse viewpoints of different stakeholders.

Strengths and weaknesses of Q evaluation

Q has made substantial contributions to social science research (Stenner, 2009). It is also beneficial in applied linguistics research, which often investigates individual perceptions or interactions. Translating this into the context of language program evaluation, the illustration in the previous sections provides a comprehensive overview of how Q can be systematically employed to evaluate language programs. It can help evaluators understand the unique perspectives of different stakeholders and use this insight to improve the effectiveness and

relevance of the language program. Using Q allows evaluators to assess the merit and the worth of the program under evaluation because it is able to showcase the subjective viewpoints of those integral to the program concerning how they saw it working (Harris et al., 2021). The quantitative factor analysis procedures, followed by the qualitative interpretation, allows for the groupings of shared viewpoints, which help evaluators address a story about certain individuals and specific contexts around the program across multiple levels. The synergy of qualitative and quantitative approaches also helps mitigate the ongoing quandary that evaluators find themselves in when choosing between qualitative and quantitative methodologies.

Q provides an opportunity to enhance course evaluations and, due to the flexibility in creating the concourse, to address specific concerns of program administrators (Brewer-Deluce et al., 2020). To be more precise, Q evaluation has some advantages over traditional program evaluation. First, it allows for the inclusion of various stakeholders providing a more comprehensive view of the program. Secondly, it encourages participatory evaluation, where all stakeholders can actively contribute to the evaluation process, fostering a sense of ownership and engagement. Third, it can capture the complexity and diversity of stakeholders' perspectives, which can often be overlooked in traditional evaluations. This can lead to more nuanced insights and a deeper understanding of the program's strengths and weaknesses. Finally, Q also allows for iterative evaluation, where the process can be repeated over time to track changes and measure the impact of any interventions or modifications to the program. This can provide valuable data for continuous improvement and ensure the program remains relevant and effective.

Q evaluation is not without its weaknesses. Since the evaluation is conducted at the program level, any changes or adaptations to other programs (based on the findings) should not be universally applied. The primary objective of Q evaluation is not to generate data that can be generalised to other programs. The social perspectives identified in a Q study are limited to the participant group, and therefore, do not cover all potential viewpoints within the domain of inquiry (Sneegas et al., 2021). In other words, the insights gained from Q evaluation are specific to the program and participant group being studied and may not directly apply to other contexts or groups. The second point pertains to the process of Q sorting. Such process may be new to many, and thus, substantial participant involvement is necessary to grasp how Q sorting operates, necessitating adequate time to explain and facilitate the process to allow participants to fully contemplate the statements they are sorting. This concern is crucial as it directly impacts the reliability of the data. This means that Q may not suit all program evaluations.

When dealing with an evaluation constrained by a limited timeframe, the extensive process of Q may not be possible (Harris et al., 2021).

Applications of Q evaluation in language education

The potential applications of Q in applied linguistics are wide-reaching as are its uses in language program evaluation. Q can help evaluators understand the subjective viewpoints that revolve around various aspects of language programs. Whether the focus is on classroom instruction, teachers themselves, course structures, language support, or instructional materials, Q provides program-specific insights without sacrificing the complexity of stakeholders' views. The evidence generated by Q evaluation is valuable for evaluators and stakeholders alike, as it enhances understanding of the factors that influence the program. This can inform policy reform or adjustments, enabling professionals in the field of language education to deliver the best possible practices. There is ample opportunity for Q to contribute to language program evaluation.

This could particularly be useful in formal higher education program. One case exemplar that illustrates the robust potential of Q evaluation in high education is its application in evaluating EMI programs. EMI programs have surged in popularity due to globalization. Given the complexities inherent to such programs, evaluating them requires an understanding of a range of stakeholders' diverse perspectives, from instructors and students to curriculum developers and administrators. In EMI programs, gauging the overall quality involves navigating a web of interconnected factors. The language proficiency of instructors, for example, is a topic of much debate. Some stakeholders hold the view that instructors should either be native speakers or possess native-like proficiency to ensure effective delivery of content. Conversely, others believe that an instructor's depth of content knowledge and their pedagogical expertise should take precedence over impeccable language skills. This dichotomy underscores the myriad of views that exist within the EMI community. However, the quality of an EMI program is not solely contingent upon the capabilities of the instructors. Factors such as curriculum design, assessment methods, available resources, and support structures also play significant roles in determining the success and effectiveness of the program. For instance, does the curriculum integrate language and content learning seamlessly? Are the assessments designed in a way that they evaluate both content mastery and language proficiency? Are there adequate resources and support mechanisms in place to cater to students who might be struggling with the language?

When using Q evaluation to assess EMI in higher education, a structured approach is

paramount, enabling institutions to delve into the diverse perspectives of different stakeholders. The journey commences by defining the purpose of the evaluation, thereby providing a clear pathway for the ensuing steps. Built upon this clarity, the next phase involves creating well-articulated statements that mirror the diverse elements of the EMI program (e.g., classroom instruction, language support, learning resources). These statements, often sourced from relevant literature, institutional documents, and interviews. The focus then transitions to the careful selection of participants, ensuring that voices across the spectrum—be it instructors, students, support staff, administrators, or alumni—are adequately represented. The culmination of this process is the data collection phase, where participants are tasked with sorting or ranking the statements. A Q sort can be administered multiple times throughout a semester to provide instructors with ongoing feedback and updates on students' progress (formative evaluation). Alternatively, it can be conducted at the end of the semester to inform instructors about the overall quality of the course (summative evaluation). Evaluators can also use Q evaluation to assess various forms of intervention in EMI programs. Conducting a Q sort before the start of the intervention to capture students' perceptions and experiences related to their language learning process. Following the intervention, another Q sort could be conducted to assess any shifts in these aspects. This provides a clearer understanding of whether a specific intervention has instigated any changes in the program or course.

Conclusion

This chapter introduces Q as a tool to evaluate language programs and provides practical guidelines for conducting Q evaluation. Unlike preceding chapters, this chapter offers a theoretical contribution rather than an empirical one. However, it will be complemented by an empirical study in the near future. As discussed, the potential of Q as an evaluative method is far reaching. For those seeking to gain insights into language programs, this chapter can be added to their methodological toolkit. Program evaluation is context-oriented, and so is Q. Both consider the unique circumstances, characteristics, and needs of the specific situation or environment in which they are applied. There is no one-size-fits-all approach to program evaluation, and thus the choice largely depends on a variety of factors (e.g., the purpose of the evaluation, the nature of the program, the context in which it operates, the specific questions that the evaluation seeks to answer). Q is not meant to replace other methods, but rather it is used as a complementary tool. It can be used alongside other qualitative and quantitative methods to provide a more comprehensive and nuanced understanding of the program under evaluation.

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References

Alderson, J. C. (1992). Guidelines for the evaluation of language education. In J. C. Alderson & A. Beretta (Eds.), *Evaluating Second Language Education* (pp. 274–304). Cambridge University Press. https://doi.org/10.1017/CBO9781139524575.012

Baker, R., Thompson, C., & Mannion, R. (2006). Q methodology in health economics. *Journal of health services research & policy*, *11*(1), 38–45. https://doi.org/10.1258/135581906775094217

Banasick, S. (2019). KADE: A desktop application for Q methodology. *Journal of Open Source Software, 4*(36), 1360. https://doi.org/10.21105/joss.01360

Beney, T. (2011). Distinguishing evaluation from research. Retrieved from http://www.uniteforsight.org/evaluation-course/module10

Beretta, A., & Davies, A. (1985). Evaluation of the Bangalore project. *ELT Journal*, *39*(2), 121–127. https://doi.org/10.1093/elt/39.2.121

Bradford, A. (2016). Toward a typology of implementation challenges facing English medium instruction in HE: Evidence from Japan. *Journal of Studies in International Education, 20*(4), 339–356. https://doi.org/10.1177/1028315316647165

Brandl, K., Mandel, J., & Winegarden, B. (2017). Student evaluation team focus groups increase students' satisfaction with the overall course evaluation process. *Medical education, 51*(2), 215–227. https://doi.org/10.1111/medu.13104

Brewer-Deluce, D., Sharma, B., Akhtar-Danesh, N., Jackson, T., & Wainman, B. C. (2020). Beyond average information: How Q-methodology enhances course evaluations in anatomy. *Anatomical Sciences Education*, *13*(2), 137–148. https://doi.org/10.1002/ase.1885

Brown, J. D. (1995). Language program evaluation: Decisions, problems, and solutions. *Annual Review of Applied Linguistics, 15*, 227–248. https://doi.org/10.1017/s0267190500002701

Brown, S. R. (1978). The importance of factors in Q methodology: Statistical and theoretical

considerations. *Operant Subjectivity*, *1*(4), 117–124.

Brown, S. R. (1980). *Political subjectivity: Applications of Q methodology in political science*. Yale University Press.

Byram, M., Porto, M., & Yulita, L. (2020). Education for intercultural citizenship. In S. Laviosa & M. González-Davies (Eds), *The Routledge handbook of translation and education* (pp. 46–61). Routledge.

Collins, L., & Angelova, M. E. (2015). What helps TESOL methods students learn: Using Q methodology to investigate students' views of a graduate TESOL methods class. *The International Journal of Teaching and Learning in Higher Education*, *27*(2), 247–260.

Cronbach, L. J. (2000). Course improvement through evaluation. In D. L. Stufflebeam, G. F. Madaus & T. Kellaghan (Eds.), *Evaluation models: Evaluation in education and human services* (2nd ed., pp. 235–247). Kluwer Academic Publishers.

De Jonge, L. P. J. W. M., Timmerman, A. A., Govaerts, M. J. B., Muris, J. W. M., Muijtjens, A. M. M., Kramer, A. W. M., & van der Vleuten, C. P. M. (2017). Stakeholder perspectives on workplace-based performance assessment: Towards a better understanding of assessor behaviour. *Advances in health sciences education*, *22*(5), 1213–1243. https://doi.org/10.1007/s10459-017-9760-7

Dziopa, F., & Ahern, K. (2011). A systematic literature review of the applications of Q-technique and its methodology. *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences*, *7*(2), 39–55. https://doi.org/10.1027/1614-2241/a000021

Green, J. L., & Stone, J. C. (1977). *Curriculum evaluation: Theory and practice, with a case study from nursing education*. Springer.

Greenwood, J. (1985). Bangalore revisited: A reluctant complaint. *ELT Journal*, *39*(4), 268–273. https://doi.org/10.1093/elt/39.4.268

Harris, K., Henderson, S., & Wink, B. (2019). Mobilising Q methodology within a realist evaluation: Lessons from an empirical study. *Evaluation*, *25*(4), 430–448.

Harris, K., Oatley, C., Mumford, S., Pham, P. K., & Nunns, H. (2021). Introducing Q methodology to program evaluators. *American Journal of Evaluation*, *42*(3), 439–453. https://doi.org/10.1177/1098214020932227

Jackson, K. M., & Trochim, W. M. K. (2002). Concept mapping as an alternative approach for the analysis of open-ended survey responses. *Organizational Research Methods*, *5*(4), 307–336. https://doi.org/10.1177/109442802237114

Jurczyk, J., & Ramlo, S. (2004, September 23–25). *A new approach to performing course*

evaluations: Using Q methodology to better understand student attitudes [Paper presentation]. 20th Annual Q Conference, Athens, GA.

Kiely, R., & Rea-Dickins, P. (2005). *Program evaluation in language education*. Palgrave Macmillan.

Kiely, R., Murphy, D. F., Rea-Dickins, P., & Reid, M. I. (1995). *PRODESS evaluation guidelines.* British Council.

Kiger, J. (2017). Evaluating evaluations: An ouroboros for medical education. *Medical Education*, *51*(2), 131–133. https://doi.org/10.1111/medu.13256

Lam, C. C. (2016). Utilising curriculum evaluation to improve the school's curriculum. In K. T. H. Kiat, M. A. Heng & C. Ratnam-Lim (Eds.), *Curriculum leadership by middle leaders: Theory, design and practice* (1st ed., pp. 229–244). Routledge.

Levin-Rozalis, M. (2003). Evaluation and research: Differences and similarities. *Canadian Journal of Program Evaluation, 18*(2), 1–31. https://doi.org/10.3138/cjpe.18.001

Lundberg, A., de Leeuw, R., & Aliani, R. (2020). Using Q methodology: Sorting out subjectivity in educational research. *Educational Research Review*, *31*, 100361. https://doi.org/10.1016/j.edurev.2020.100361

Marrs, L. W., & Helge, D. I. (1978). The role of needs assessment in program planning and evaluation. *The Journal of Special Education, 12*(2), 143–151. https://doi.org/10.1177/002246697801200207

Militello, M., Bass, L., Jackson, K. T., & Wang, Y. (2013). How data are used and misused in schools: Perceptions from teachers and principals. *Education Sciences*, *3*(2), 98–120. https://doi.org/10.3390/educsci3020098

Munby, J. (1978). *Communicative syllabus design*. Cambridge University Press.

Norris, J. M. (2016). Language program evaluation. *The Modern Language Journal*, *100*(1), 169-189. https://doi.org/10.1111/modl.12307

Norris, J. M., & Watanabe, Y. (2012). Program evaluation. In C. A. Chapelle (Ed.), *The encyclopedia of applied linguistics* (pp. 1–6). Wiley-Blackwell.

Nuttall, D. L. (1991). Evaluating the effects of ELT. In *The social and economic impact of ELT in development. Dunford house seminar report* (pp. 11–14). British Council. https://eric.ed.gov/?id=ED358713

Oermann, M. H., Conklin, J. L., Rushton, S., & Bush, M. A. (2018). Student evaluations of teaching (set): Guidelines for their use. *Nursing Forum*, *53*(3), 280–285. https://doi.org/10.1111/nuf.12249

Oring, K. E., & Plihal, J. (1993). Using Q-methodology in program evaluation: A case study

of student perceptions of actual and ideal dietetics education. *Journal of the American Dietetic Association, 93*(2), 151–157. https://doi.org/10.1016/0002-8223(93)90830-e

Pawson, R. (2013). *The science of evaluation: A realist manifesto*. SAGE.

Ramlo, S. (2011). Facilitating a faculty learning community: Determining consensus using Q methodology. *Mid-Western Educational Researcher, 24*(1), 30–38.

Ramlo, S. (2015). Q methodology as a tool for program assessment. *Mid-Western Educational Researcher, 27*(3), 207–223.

Redburn, F. S. (1975). Q factor analysis: Applications to educational testing and program evaluation. *Educational and Psychological Measurement, 35*(4), 767–778. https://doi.org/10.1177/001316447503500403

Rodl, J. E., Cruz R. A., & Knollman, G. A. (2020). Applying Q methodology to teacher evaluation research. *Studies in Educational Evaluation, 65*, 100844. https://doi.org/10.1016/j.stueduc.2020.100844

Schmolck, P. (2014, March). *PQMethod - 2.35.* PQMethod Manual. http://schmolck.org/qmethod/pqmanual.htm

Sink, C. A., & Lemich, G. (2018). Program evaluation in doctoral-level counselor education preparation: Concerns and recommendations. *American Journal of Evaluation, 39*(4), 496–510. https://doi.org/10.1177/1098214018765693

Smith, P. D. (1970). *A comparison of the cognitive and audiolingual approaches to foreign language instruction: The Pennsylvania foreign language project*. Center for Curriculum Development.

Sneegas, G., Beckner, S., Brannstrom, C., Jepson, W., Lee, K., & Seghezzo, L. (2021). Using Q-methodology in environmental sustainability research: A bibliometric analysis and systematic review. *Ecological Economics, 180*, 106864. https://doi.org/10.1016/j.ecolecon.2020.106864

Stainton Rogers, R. (1995). Q methodology. In J. A. Smith, R. Harré & L. Van Langenhove (Eds.), *Rethinking methods in psychology* (pp. 178–192). SAGE. https://doi.org/10.4135/9781446221792

Stenner, P. (2009). Between method and ology: Introduction to special issue. *Operant Subjectivity, 32*, 1–5.

Steyn, C., Davies, C., & Sambo, A. (2019). Eliciting student feedback for course development: The application of a qualitative course evaluation tool among business research students. *Assessment & Evaluation in Higher Education, 44*(1), 11–24.

https://doi.org/10.1080/02602938.2018.1466266

Stufflebeam, D. L. (1983). The CIPP model for program evaluation. In G. F. Madaus, M. S. Scriven & D. L. Stufflebeam (Eds.), *Evaluation models: Viewpoints on educational and human services evaluation* (pp. 117–141). Springer. https://doi.org/10.1007/978-94-009-6669-7

The United Nations Evaluation Group. (2016, June). *Norms and standards for evaluation (2016)*. http://www.unevaluation.org/document/detail/1914

Thumvichit, A. (2022). Illuminating insights into subjectivity: Q as a methodology in applied linguistics research. *Applied Linguistics Review*. https://doi.org/10.1515/applirev-2021-0205

Van Exel, J., & de Graaf, G. (2005). *A Q methodology sneak preview*. Q methodology. https://qmethod.org/portfolio/van-exel-and-de-graaf-a-q-methodology-sneak-preview/

Watts, S., & Stenner, P. (2005). Doing Q methodology. *Qualitative Research in Psychology, 2*(1), 67–91.

Watts, S., & Stenner, P. (2012*). Doing Q methodological research: Theory, method and interpretation*. SAGE.

Weiss, C. H. (1998). *Evaluation: Methods for studying programs and policies* (2nd ed.). Prentice Hall.

Yang, X., & Xu, M. (2021). The use of Q methodology to evaluate instruction in higher education. In S. Conklin, B. Oyarzun, R. M. Reese & J. E. Stefaniak (Eds.), *A practitioner's guide to instructional design in higher education* (pp. 117–123). EdTech Books. https://dx.doi.org/10.59668/164.4270

Chapter 10

Evaluation of a training program for community interpreters and translators in South Korea

Hyunjin Park

Introduction

The purpose of this study is to deploy Q methodology to evaluate a course aimed at training community interpreters and translators to employ them in public services towards migrant wives in Korea.[18]

The term 'migrant wives' is used in the Korean context to indicate migrant females, mainly from East and Southeast Asian countries, who move to Korea to marry Korean men. In most cases, migrant wives are from disadvantaged backgrounds and do not possess a high competence in Korean language (Park, 2017a, b). The public interpretation service offered by the Korean government is a form of PSIT (Public Service Interpreting and Translation) (Valero-Garces, 2014), a service which is generally provided to guarantee and protect migrants' human rights by allowing those who cannot speak the language of the host country to benefit from basic national services provided by the public administration, such as public education and health care (Lee et al., 2014). In Korea, the term 'community interpretation' is preferred to PSIT, mostly used in the European context (see Valero-Garces, 2014). Therefore, it is adopted in this chapter in line with Lee et al. (2014).

Korea has recently experienced a sharp increase in immigrant population, and the country now presents a more accentuated multicultural environment compared to two decades ago. The reasons behind migration to Korea are diverse. While many migrants and migrant families decide to settle in Korea for employment purposes, one of the largest migrant groups is still represented by females migrating for marriage purposes. The number of migrant wives, and consequently of international marriages, has increased since the introduction, starting from 2014, of amendments to the requirements to receive a marriage migration visa and the implementation of policies to support international marriages.[19]

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[18] This chapter uses 'Korea' to indicate 'South Korea'.

[19] Statistics related to the populations of immigrant wives in South Korea are available on the website of the Statistics Korea office, http://www.index.go.kr/potal/main/EachDtlPageDetail.do?idx_cd=2819.

The Korean community interpretation and translation service is provided through a program administered by the Ministry of Gender Equality and Family. Beyond administering the program, the same Ministry also overviews the courses for new community translators and interpreters, called in Korean *new education* courses. These courses are aimed at training foreign nationals, i.e., in this case, migrant wives themselves, to become interpreters and translators. Upon completion of a *new education* course, migrants are employed by a public Multicultural Family Support Center and begin their activity as interpreters. The same Ministry also organises continuing professional development courses, called *remuneration* courses in Korean, aimed at those interpreters who have previously completed a *new education* course.

In Korea, the demand for interpretation services aimed at migrants has been increasing along with the increase of the foreign population. However, educational research regarding training migrants to become interpreters in the Korean context is scant and limited to the analysis of the educational framework or focused on case studies of people involved in the interpretation services (see, for example, Ryu, 2006; Lee et al., 2014, 2015). Nevertheless, such research has been valuable in collecting curriculum data to increase the quality of the interpretation service through increasing the expertise of the service providers.

This study aims to give voice to the migrant wives themselves by examining the perceptions that they have about the content structure of such courses for community interpreters and translators. The unique perspective considered here is that of migrant wives who became interpreters and, therefore, can communicate their subjective viewpoint from the stance of both the service recipient and the service provider. By taking into consideration this unique perspective, this study will provide an exploratory evaluation of the quality and effectiveness of the community interpreter training educational service provided by the Korean government to support multicultural families and will consider possible improvements.

Literature review

Multicultural families in Korea and migrant wives

Korea had been long in need of a policy to safeguard the rights of migrant women in the context of international marriages. The policy, eventually introduced in 2014, brought a steady increase in the number of migrant women. In 2021, the number of foreigners residing in Korea on a spouse visa was 200,554, just a small increase of 0.01% from the previous year due to the COVID-19 pandemic. By gender, women account for the absolute majority, with 168,611

(81.1%)[20]. The distribution of migrant spouses is not even across the country. By residential area, 54.1% of married migrants live in the Seoul metropolitan area, which includes the Gyeonggi Province (30.8%), the city of Seoul (16.4%), and the city of Incheon (6.9%). By nationality, migrant spouses from China are the largest group, with 59,770 (35.4%) people, followed by spouses from Vietnam with 41,447 (24.6%) and from Japan with 15,074 (8.9%).

Unlike migrant workers returning to their country after a certain time, most migrant wives usually acquire Korean nationality, become members of Korean society, and settle in Korea. In other words, migrant wives enter a new society through international marriage and create new families in their host country. In this process, they often have difficulties adapting to their new life due to a lack of Korean language skills. This causes them to experience issues of poor communication with their children, who attend Korean schools and receive little support to learn the language of their mother (see, for example, Park, 2019). Reports regarding the low academic ability of children from multicultural families highlight a serious social issue. For example, data from the Central Multicultural Education Centre show that in 2017 the school drop-out percentage among students from multicultural background were of 1.47% and 2.11%, respectively for middle and high school students, against a national average of 0.7% (middle school) and 1.5% (high school).[21] In this situation, interest in services that support communication among and the language skills of multicultural families continues to increase. So far, this has resulted in introducing policies to support migrants in establishing a firm position within Korean society.

Korea's multicultural policies are divided into ‘multicultural family policies’ and ‘policies for foreigners’. Multicultural family policies are introduced by the Multicultural Family Policy Committee, operated by the Ministry of Gender Equality and Family, and based on the Multicultural Family Support Act enacted in 2008. This represented a long-term attempt to crack down on illegal international marriage brokers, to address the human rights of marriage migrants and to support their stable settlement. From 2018, the policy targets have been revised to include multicultural families specifically. Further support-oriented policies are still being designed to expand the current regulations (Ministry of Gender Equality and Family, 2018).

The Korean public service for community interpreters and translators

Community interpretation and translation aims at providing interpreting and translation

[20] As of 2021, the Korean population is 51,740,000. The number of marriage migrants is about 0.38% of the Korean population (Statistics Korea, 2022).

[21] https://www.edu4mc.or.kr/

services from/to Korean and the native language of migrants. As a result, when migrants do not speak the language of the host country, they benefit from this service by being able to communicate with the public administration (Lee et al., 2014). Unfortunately, it was not until 2009 that Korea recognised the need to introduce a public and free interpretation and translation service for migrants.

In countries such as Australia and Sweden, which have experienced more extensive and much earlier multiculturalism, the education and qualification certification system for community interpreters and translators had been introduced much earlier (Lee et al., 2014); however, it is administered differently from Korea. In Australia, training for community interpreters is offered by ten universities, which operate a curriculum approved by the NAATI (National Accreditation Authority for Translators and Interpreters). In Sweden, the National Agency for Higher Vocational Education, supports interpretation courses and programmes offered at beginners and more advanced level in different languages, including Swedish Sign Language. The programs are up to four years in duration and are offered by different providers across the country. The role of the agency is to conduct reviews and inspections of the educational sites and improve the quality of the programs.[22] Unlike these two countries, most opportunities for interpreters and translators training in most countries focus on preparing interpreters for international conferences or business interpretations. In other words, in most cases, the quality of the training for community interpretation is generally low and tends to be seen as a temporary solution to support the communication needs of migrants (Pérez & Buendia. 2011; Valero-Garcés, 2014).

Corsellis (2008) pointed out three problems of community interpreters and translators training courses. Firstly, the status of the interpreting profession is generally perceived to be low, and the curriculum content is often insufficient. Secondly, most of the languages required for community interpreting and translation are minority languages, and there is often a lack of university departments that offer a major in those languages. Thirdly, existing community interpreters and translators are often negative about joining a formal training course because many are already interpreting in the field even if they do not have formal qualifications; in other words, they do not see the point of additional financial and time commitment. The Korean context is affected by all these issues. The social status of community interpreters and translators is low, and the courses offer limited contact hours. In addition, the foreign languages

[22] https://www.myh.se/in-english/interpretation-courses-and-programmes-tolkutbildningar (accessed 2 November 2023)

currently provided by public institutions are English, Chinese, and Vietnamese. However, there is also a strong need for other languages, such as, for example, Uzbek. As a result, international undergraduate students without formal training are often active in the community as interpreters or translators (Park, 2021).

Community interpretation and translation courses must focus on a target with particular needs and, therefore, must be set up with a dedicated curriculum. Community interpreters and translators must operate with languages that, in many cases, are perceived to have low social status and for people that often belong to minority groups, not just in Korea but also in their original countries. Recipients of interpretation and translation services represent a variety of cultural and economic backgrounds, academic skills, and language proficiencies (Niska, 2005, as cited in Lee et al., 2014). Therefore, the design of a training course for community interpreters and translators must be developed taking into consideration the uneven and often disadvantageous position of the recipients of the service. In other words, when developing a community interpretation and translation training curriculum, it is necessary to consider the socio-cultural context and set educational goals reflecting the opinion of a wide range of stakeholders, from the public institution to the service recipients (Kelly, 2005).

The Korean marriage migrant interpretation and translation service project

As previously mentioned, the translation and interpretation service program for marriage migrants has been operated by the Ministry of Gender Equality and Family since 2009. The program aims to support resolving communication issues experienced by marriage migrants upon arriving in Korea and during the earlier stages of settling in the country. The program also aims at hiring marriage migrants as interpreters to support other migrants. The program's purpose goes beyond providing interpretation and translation for basic communication needs and wants to foster the social integration of families of migrant wives with poor Korean language skills. Some of the languages commonly supported by this service include Vietnamese, Chinese (Mandarin), Tagalog, Mongolian, and Thai (Ministry of Gender Equality and Family, 2015). Enrolment criteria to join the program for community interpreters and translators are the possession of at least a secondary education degree, the acquisition of a level 3 TOPIK[23] (Test of Proficiency in Korean) certificate, and at least two years of residence in Korea.

Community interpreter training is one of the forms of training offered by the Korean

[23] A TOPIK level 4 is equivalent to an upper-intermediate level.

government to foster a skilled workforce for family services. As already mentioned, it is divided into two streams, called *new education* and *remuneration education* (Ministry of Gender Equality and Family, 2015). The *new education* stream is for those who have never received any formal interpretation and translation training. Therefore, it is aimed at training and hiring interpreters and translators for the government-run Multicultural Family Support Centres. The *remuneration education* stream is a form of continuing professional development, and it caters for those who have already completed a *new education* course and are already working as community interpreters.

The *new education* stream consists of a 50-hour course. This is divided into 16 hours of interpretation training, 14 hours of Korean language training, and 20 additional hours of minor topics.

Table 1. Summary of the content of 'new education' courses.

Class type	Curricular hours	Content (hours indicated in parentheses)
Interpretation training	16 hours	Understanding the role of community interpreters (2), theory of interpretation (2), ethics of interpretation (2), interpretation practice (1), interpretation placement (5), interpretation for multicultural counselling (2), medical interpretation (2)
Korean language training	14 hours	Advanced Korean language (14) (i.e., grammar, pronunciation, Korean culture, medical terminology, childcare terminology)
Others	20 hours	Enrolment ceremony and course orientation (2), understanding of multicultural family support centres (2), understanding culture and multiculturalism (2), legal terminology (2), Topic discussion: Translator's mission (6) administrative practices and online education systems (4), professional evaluation (2)

The *remuneration education* courses include ethics of interpretation, practice of interpretation to/from both languages, Korean law, counselling and ethics of counselling, and aspects of Korean culture and language. The number of hours of the *remuneration education* courses varies depending on the years of experience. After an aspiring community translator completes a 50-hour *new education* training course, in the following year, they can undertake a 60-hour *remuneration education* course, then respectively a 50-hour and 40-hour course in the subsequent two years. After that, translators and interpreters are offered the opportunity to take

a 15-hour course a year (see Table 2). Opportunities to start the *new education* course are offered three times a year through face-to-face courses. *Remuneration education* courses as well are run three times a year. However, unlike *new education* courses, they combine online and offline components, with the online component conducted in asynchronous mode through a dedicated website.

Table 2. Training hours by course type.

Year	**Course type**	**Offline training hours**	**Online training hours**	**Total training hours**
	New	50	-	50
1st year	Remuneration	30	30	60
2nd year	Remuneration	20	30	50
3rd year	Remuneration	20	20	40
4th year	Remuneration	15	-	15

Research questions

Considering that the Korean community interpretation and translation training service aims at training interpreters to support marriage migrants in their communication needs upon their arrival in Korea, and at the same time, at empowering migrant wives as interpreters by offering employment, it is necessary to examine the training opportunities provided by this program from the perspectives of both interpreters and marriage immigrants. Consequently, the research questions that this chapter wants to address are as follows.

RQ1. How do community interpreters evaluate the curriculum of community interpreter courses for migrant wives from both their own and the service recipient's viewpoint?

RQ2. How effectively can Q methodology be used to evaluate courses for community interpreters for migrant wives?

Methodology

Research setting and participants

Three female marriage migrants participated in this study, two originally from Vietnam, Juhui and Yujin, and one from Mongolia, Sora.[24] At the time of the research, the two women from Vietnam were employed at a multicultural family support centre in Seoul. The participant from Mongolia lived in Jeonju, located in the south-west region of Korea. While she received training as an interpreter, she was not working in the field at the time of the data collection.

Juhui came to Korea after graduating from university in Vietnam, and at the time of the research, she was living with her Korean husband and two middle school-age sons. Upon arrival in Korea, she completed a Korean language beginner course through a Korean language home-visit teaching service provided by the Korean government. However, her grammar accuracy was lacking because she learned most of Korean in an informal setting.

Yujin met her Korean husband in Vietnam and came to Korea after completing her university undergraduate degree in Vietnam. In Korea, she obtained a degree in Korean language education through an online university. At the time of the research, she lived with her two daughters, one in her early twenties and the other of high school age.

The third participant, Sora, completed an undergraduate degree in interpreting and translation before migrating to Korea. At the time of the data collection, Sora was enrolled as a postgraduate student and lived with her husband and a 3-year-old daughter. Further details about the three participants are available in Table 3.

Table 3. Demographics of the study participants.

Name	**Duration of residence in Korea**	**L1**	**Translation and interpretation experience since the first year of training**	**Highest degree**
Juhui	10 years	Vietnamese	5 years	Bachelor's degree
Yujin	13 years	Vietnamese	9 years	Master's degree
Sora	8 years	Mongolian	6 years	Enrolled in a PhD program

Research tool

The concourse for the present study was focused on the syllabus of the courses for community

[24] All names are pseudonyms.

interpreters illustrated above, available from the website of the Ministry of Gender Equality and Family. The statement list (Q sample) also included items related to communication and counselling training, as these aspects are commonly included in both *new education* and *remuneration education* courses. Additional statements were included, mainly related to specific skills such as interpreting medical and legal discourses and computer and administrative skills such as using Korean word processors and spreadsheets. The final Q sample reported statements representative of all the training components of community interpreter courses. The complete list of statements is reported in Appendix A, together with the factor arrays. The grid used in this study was designed with eleven columns, as in Table 4.

Table 4. Sorting grid.

Column value	-5	-4	-3	-2	-1	0	1	2	3	4	5
N. of statements	1	2	3	4	4	5	4	4	3	2	1

Data collection procedure and analysis

The participants were asked to sort the same Q sample twice. The first condition of instruction asked the participants to sort the statements from the perspective of the community interpreter. The second condition of instruction asked the participants to conduct the sort from the perspective of a migrant wife who receives the service. This particular design was adopted considering that participants, in this specific context, may hold different opinions depending on whether they approach the issue from the perspective of the interpreter or the migrant wife. As a result, a total of six sorts were collected. The collection of multiple sorts conducted under different conditions of instruction by the same participant recalls the use of Q methodology as a single-case study, a technique already used in language studies by Fraschini (2023). Brown (2019, p. 674) remarks that this design, which William Stephenson himself had widely demonstrated, allows the researcher to apply "the penetrating power of factor analysis to the study of individual lives" and, therefore, allows the researcher to grasp more nuanced shades of the participant's subjectivity.

The researcher met the participants individually and in person, and the collection of the Q sorts was facilitated by an online application (Fraschini et al., 2022). After that, the researcher conducted an interview based on the distribution of the statements. The interview was conducted in a semi-structured format for 20 to 30 minutes per participant.

The three study participants met with the researcher, listened to the explanation of the

study, and then agreed to participate. The researcher already knew Sora but was introduced to Juhui and Yujin through a multicultural family support centre located in Seoul. The participants conducted the sorting exercise in three steps. Firstly, they looked at the 34 statements one by one and divided them into three categories: 'not at all', 'not sure', and 'very much'. Secondly, they placed the same statements on a grid of 11 columns ranging from "-5 = not at all" to "+5 = very much". In this case, the position of the statements depended on the personal perspective of the participants. Lastly, prompted by the online application, the participants explained the reason for their choice of the statements placed at both ends of the sorting grid.

As mentioned previously, the participants sorted the statements twice, from the interpreter's perspective and the migrant wife's perspective. The sorts collected under the first condition of instruction, related to the interpreter's perspective, were labelled sorts Juhui 1, Yujin 1, and Sora 1. The sorts representing their perception of the perspective of a migrant wife were labelled Juhui 2, Yujin 2, and Sora 2. All the six sorts collected were analysed together with Ken-Q Analysis software (Banasick, 2019). All factors were extracted with Centroid method and subjected to Varimax rotation. When the factor loading value of a sort was greater than +0.5 or smaller than -0.5, the sort was judged to be significant and retained. In this study, no sort was excluded because loading significantly on two factors or because it did not load significantly on any factor. The participants' factor loading is reported in Appendix B.

Results

Factor 1

Factor 1 includes the perspectives of Sora 1, Juhui 1, and Juhui 2.

The item showing the highest ranking in this factor was "The translation and interpretation curriculum should include training to improve accurate and natural use of the Korean language at the advanced level" (S6: +5). Also "The translation and interpretation curriculum should include basic Korean language training skills" (S24: +4) and "The translation and interpretation curriculum should include ways to make a positive impression on the recipient of the service" (S3: +3) showed a high rating. The rating of these statements calls for equipping community interpreters and translators with better Korean language skills. We should not forget that community interpretation often occurs in delicate circumstances, such as health-related or legal settings. Therefore, the quality of service is of the utmost importance for the migrant, who needs an accurate and reliable interpreter. Furthermore, other statements related to Korean language skills emerging from this factor are "The translation and

interpretation curriculum should include technical content for interpretation and note-taking" (S7: +2) and "The translation and interpretation curriculum should include consideration of meaningful case studies" (S9: +2). These statements express the needs of the participants to gain practical skills expendable in the field. This aspect was also stressed by Sora in her interview when she remarked that "practice is the most important not only in the interpretation curriculum but also in other curriculums."

Overall, this factor could be summarised as "the translation and interpretation curriculum should use Korean accurately and develop expertise through practice".

Factor 2

Factor 2 includes the perspectives of Yujin 2, Sora 2, and Yujin 1.

The distinguishing statement that showed the highest rating in Factor 2 was "the translation and interpretation curriculum should teach how to create a comfortable atmosphere for counselling " (S15: +4). A further statement ranked significantly higher than in factor 1 was "the translation and interpretation curriculum should teach what to pay attention to when counselling" (S17: +3). On the other hand, significantly low ranked statements were "the translation and interpretation curriculum should include training on how to use Excel" (S20: -4) and "The assessment method of the translation curriculum should be changed" (S33: -4). It was found that this factor also ranked low the statements "The translation and interpretation curriculum should be taught in both online and offline modes" (S31: -3) and "The translation and interpretation curriculum should include basic Korean language training skills" (S24: -3).

Yujin 2, who represents the sort with the highest loading on Factor 2, ranked at +5 the statement "the translation and interpretation curriculum should include information on ways to communicate well between parents and children". She explained this choice by saying that "From the perspective of the migrant, I want to get married and raise a baby well. Children are fine when they are very young, but having conversations with them is important as they grow up. After a child reaches puberty and they gradually move away from the fifth grade of primary school, they often become more troubled and stressed. When that happens, conflicts with your husband can also increase, and issues with children will last longer. Therefore, I think training should include ways to communicate well with children."

On the other hand, the statement with the lowest ranking was "the translation and interpretation curriculum should be taught in both online and offline modes" (S31: -5). Regarding this aspect, Yujin explained that "From the perspective of a female migrant wife, it is enough just to receive a good education [as an interpreter], how the education is delivered is

not important".

Factor 2 can be labelled as "the interpretation and translation curriculum should focus on the role of the interpreter as a counsellor and on the understanding of multicultural families".

Discussion

The perspective of Factor 1 foregrounds that "the interpretation and translation curriculum should allow the interpreter to use Korean accurately and develop expertise through practice." Factor 1 includes Sora's position as an interpreter, Juhui's position as an interpreter, and Juhui's position as a migrant wife. In other words, from two out of three interpreters' points of view, what is most important for a community interpreter is to use Korean accurately. The interpretation curriculum should include instruction on using Korean accurately and naturally, an aspect that all participants in their interviews further stressed. Juhui and Yujin, currently working as interpreters, said they sometimes do not understand what Koreans say when they listen to Koreans and translate for foreigners. Then, Juhui also added that sometimes she needs to ask and check again before translating, and if the Korean speech is too fast then she does not understand. In particular, Juhui said that language accuracy is important because of the many medical terms used when interpreting in hospitals.

Similarly to interpretation, accurate use of Korean is deemed to be important in translation, too. Juhui and Yujin never formally learned Korean at a Korean language education institution. In the early days of settling in Korea, they learned Korean through a home-visit learning program but felt they learned more Korean through everyday active use of the language. In this situation, the weakest aspect of their language proficiency is grammatical accuracy. Lacking grammatical accuracy, for them, is not a problem when interpreting because they are still able to communicate the meaning effectively. However, it is felt as an issue when translating written texts.

An advanced level of Korean is required for accurate and fluent communication in Korean; however, with the current requirements, it is possible to enrol in a community interpreter course with a Korean language proficiency equivalent to an intermediate level. At this proficiency level, everyday communication is easily achievable, but the correct use and understanding of complex terminology is possible only at a higher proficiency level. This also explains why the participants thought that learning the use of neologism and slang is not necessary.

Sora emphasised the importance of practice. She was the only one of the three who majored in interpretation at the undergraduate level. To her, compared to the professional

translation courses offered by her undergraduate department, the translation placement provided by the community interpreter translation course must have felt insufficient. In fact, in these courses, the placement is conducted online only in "remuneration" programs. Therefore, rather than actual hands-on experiences, these placements offer lectures and practice opportunities focused on virtual situations. In other words, even after the placement, it is still necessary to build up experience in the field. The problem of the lack of meaningful practice in the community interpreter courses has also been pointed out by Lee et al. (2014, 2015). In summary, courses for community interpreters and translators must provide more education focused on building Korean language accuracy and proficiency and meaningful interpretation placement opportunities.

The statements "The translation and interpretation curriculum should include training to improve accurate and natural use of the Korean language at the advanced level" and "The translation and interpretation curriculum should include basic Korean language training skills" result in a large statistical disagreement across the two factors, indicating the perspective of Factor 2 is much less worried about acquiring language skills and more concerned regarding other aspects of the community interpreter profession.

The viewpoint expressed by Factor 2 foregrounds that 'the role of counsellors and the understanding of multicultural families are important aspects of the interpretation curriculum'. Factor 2 includes Yujin's and Sora's positions as a migrant wives and Yujin's position as an interpreter. In this respect, people who receive the service stress the need to receive counselling along with the interpretation service. This may indicate that migrant wives need a professional consulting environment with a caring atmosphere. This need is also confirmed by the strong agreement on the items related to the atmosphere of the counselling environment and the need for interpreters to have an understanding of childcare and child education. Regarding this last aspect, Yujin said that, as a parent of university and high school children, she experienced too many difficulties when raising them. This is why married migrant women need counselling on what to do during children's puberty and beyond when children enter university.

Sora remarked that "It is important to learn how to provide counselling and create a comfortable atmosphere in interpreters courses because interpreting is a job that connects people to people, so I think that by creating the proper atmosphere, you make good use of the time during situations of simultaneous interpretation". Sora also said that from the perspective of migrant wives, the interpretation is successful only when the conversation happens in the right atmosphere. This result reflects Lee et al. (2014). In their survey, conducted on 258 interpreters from 198 multicultural family support centres nationwide, they found that 69.1%

of the respondents expressed the need for more counselling-focused content. Unlike interpreters at international conferences, community interpreters need counselling education because they must interpret, in most instances, problems occurring in private and social life.

Sora was the only person divided across Factor 1 as an interpreter and Factor 2 as a marriage migrant. Among the three participants, only Sora majored in interpretation and translation in an undergraduate department and received a professional education. Additionally, Juhui's children are middle school students, while Yujin's children are high school and university students; however, Sora's child is three years old; therefore, she has less experience raising children than the other two participants. Her background may explain why Sora's perspective is split across two factors. Additionally, this shows that the evaluation of the community translation curriculum may vary depending on the position of the evaluator and their professional and personal life experiences.

The personal background is also important in interpreting Juhui's and Yujin's perspectives. Juhui had a middle school son, but she also thinks that her own social life is important. She reported in an interview that she felt frustrated to have to stay at home after giving birth since she wanted to have a social life, too. She thought of interpreting as a way to get in contact with people, and therefore, she wanted to improve her expertise in a professional direction and use Korean fluently. In comparison, at the time of the interview, Yujin had two children attending respectively high school and university. Among the three participants, she had been raising children for a longer time, and she met several challenges. Her life experience is reflected in Factor 2 and highlights that understanding multiculturalism and counselling training are aspects needed by future community interpreters. In this case, even if, for some aspects, the participants hold different opinions, whether they observe the issue from either the interpreter's or the marriage migrant's position, what they consider important in interpretation training courses stays almost the same.

Suggestions for the improvement of translation and interpretation courses

This chapter demonstrates the application of Q methodology in evaluating an educational program by including the nuanced perspectives of the main stakeholders of the program, i.e., participants who are at the same time interpreters and migrant wives. Nevertheless, the effectiveness of such an application of Q methodology is not simply represented by the possibility of foregrounding the participant's perspective. The effectiveness sits with how the insights gathered can be applied to make real-world changes, in our case, on how they can foster an improvement in the design of the community interpreter program.

It is possible to put forward some suggestions to improve the current Korean community interpretation curriculum. Firstly, as can be seen from Factor 1, community interpreters think that they should be able to use Korean fluently and accurately. Currently, anyone with a level 3 corresponding to a low-intermediate level or higher Korean language ability can apply. However, international students aspiring to enrol in Korean universities are required a level 4 certificate (equivalent to an upper intermediate level), and it is possible to point out that the requirement of a low-intermediate proficiency for interpreters and translators reflects a comparatively low standard. In particular, terms used in interpretation and translation situations related to medical or legal fields are usually taught only in advanced curricula. The participants' opinion of the present study demonstrates that the language proficiency course enrolment requirement should be revised. The participants indicated that the 14 hours of language instruction included in the course needed to be increased. If, on the one hand, it would not be practical to increase the proficiency requirement to enrol in the course since this would prevent too many people from participating in the program, on the other hand, it may be possible to increase the amount of time that the course dedicates to language instruction, in order to allow participants with a lower Korean language proficiency to improve their knowledge and understanding of the language.

Secondly, it is necessary to increase the actual translation practice time. This, too, clearly represents an improvement needed in relation to participants' linguistic skills. Currently, in new training courses, interpretation practice by language area is taught for 1 hour, and interpretation placement by language area is taught for 5 hours. However, since interpreting services may be required in a variety of situations, it is necessary to practise in actual situations rather than in virtual or hypothetical scenarios. In addition, appropriate feedback should be provided after the practice. Therefore, the person receiving the interpretation training should be able to know what they did well and what they need to improve since it is only possible to interpret accurately without making mistakes in actual translation situations. This may represent an issue since it is not always straightforward to find staff proficient in the target language. To improve feedback on translation practice, the suggestion is to offer the opportunity to experienced community interpreters to participate in the program as instructors or assistant instructors. In this way, migrant wives would be empowered not just by becoming translators, but their expertise would be recognised by hiring them as translator trainers. Additionally, the translation practicum should allocate more time to practice in an offline environment now that the effects of the COVID-19 pandemic are waiving and people go more and more, if not entirely, back to face-to-face interactions.

Thirdly, more effort is needed to train counsellors with a deeper understanding of multicultural families. To this end, it will be necessary to consult with people from multicultural backgrounds about their needs and increase in-class counselling training time. Currently, aspects of multicultural counselling for interpreters are taught for just two hours in new education training courses. This amount of time is not sufficient to provide a meaningful effect. In order to provide counselling services to multicultural families, it is necessary to have a comprehensive understanding of multicultural couples and communication between parents and children in multicultural families. It is also important to consider, in counselling training, whether the recipient of the service lives with parents-in-law, as this may affect the relationship of the female migrant with her husband's family. In summary, the expertise of interpretation and translation professionals will undoubtedly benefit from an increased time allocation to counselling instruction. This can be done by starting partnerships between a community interpretation and translation program and the numerous short-term courses in counselling offered by institutes of life-long education associated with universities.

Conclusion

This study used Q methodology to evaluate the community translation curriculum. It is possible to hypothesise that different perspectives regarding community interpreters' training were affected by the degree of professional expertise and the interpreter's personal life experiences, such as the experience in raising children. Juhui’s and Yujin’s perspectives as an interpreter and migrant wife were consistent and loaded on a single factor, respectively. On the other hand, Sora's two perspectives were divided across Factor 1 and Factor 2, probably affected by the fact that she majored in interpretation and translation at university and had a younger child. The understanding of this split perspective within individuals has been achieved by asking the participants to sort the same set of statements from two different perspectives. It highlights one of the advantages that Q methodology has in investigating research participants' points of view.

The evaluation of the community translation curriculum highlighted two major areas of improvement. Factor 1 indicates that the translation curriculum should help the translator to accurately use the Korean language and develop expertise through practice. In contrast, Factor 2 represents the perspective that the translation curriculum should stress the role of interpreters as counsellors and should provide better training to understand multicultural families. The results showed the need to strengthen Korean language skill requirements and to increase the time allocated to the placement component of training courses.

Plenty of effort is still needed to improve the professionalism of community

interpreters in Korea. The results of this study will help marriage immigrants who work as community interpreters reach a higher degree of professionalism and establish their place in Korean society.

References

Banasick, S. (2019). KADE: A desktop application for Q methodology. *Journal of Open Source Software, 4*(36), 1360. https://doi.org/10.21105/joss.01360

Brown, S. (2019). Subjectivity in the human sciences. *The Psychological Record, 69*(4), 565-579. https://doi.org/10.1007/s40732-019-00354-5

Corsellis, A. (2008). *Public service interpreting: The first steps*. Palgrave Macmillan.

Fraschini, N. (2023). Language learners' emotional dynamics: Insights from a Q methodology intensive single-case study. *Language, Culture and Curriculum, 36*(2), 222-239.

Fraschini, N., Paterson, C., Celebrado, B., Tan, A., Ai, J., Poovathanickal, E., Zhong, W., and Blagden, L. (2022). Q Sort Collection App (v1.0.1). *Zenodo*. https://doi.org/10.5281/zenodo.6950897

Kelly, D. (2005). *A Handbook for Translator Trainers*. St. Jerome.

Lee, J., Chang, A., Choi, M., & Huh, J. (2014). A case study of community interpreter training in South Korea: Focusing on training of marriage migrant women. *The Journal of Interpretation and Translation Education, 12(3),* 155-180.

Lee, J., Chang, A., & Huh, J. (2015). Recommendations for the training of community interpreting in the context of marriage migrant T&I services. *The Journal of Translation Studies, 16(3),* 197-228.

Ministry of Gender Equality and Family (2015). *Guide to multicultural family support projects*. Ministry of Gender Equality and Familiy. http://www.mogef.go.kr/mp/pcd/mp_pcd_s001d.do?mid=plc503&bbtSn=695715

Ministry of Gender Equality and Family (2018). *The 3rd basic plan for multicultural family policy (2018~2022)*. Ministry of Gender, Equality and Family. https://www.korea.kr/archive/expDocView.do?docId=38218#expDoc

Park, H., (2021) Status and need analysis of international students for community translation and interpretation, *Journal of The Society of Korean Language and Literature, 93*. 389-413.

Park, M. (2017a). Resisting linguistic and ethnic marginalisation: Voices of Southeast Asian marriage-migrant women in Korea. *Language and Intercultural Communication*, *17*(2), 118-134.

Park, M. (2017b). 'I want to learn Seoul speech!': Language ideologies and practices among rural marriage-migrants in South Korea. *International Journal of Bilingual Education and Bilingualism*, *23*(2), 227-240.

Park, M. (2019). Challenges of maintaining the mother's language: Marriage-migrants and their mixed-heritage children in South Korea. *Language and Education*, *5*(33), 431-444.

Pérez, M. M. F., & Buendia, C. T. (2011). Specific realities, particular needs: Designing interpreter training courses. In C. Kainz, E. Prunc, and R. Schogler (Eds.), *Modelling the field of community interpreting: Questions of methodology in research and training* (pp. 87-102). Wien/Berlin: LIT.

Ryu, H. (2006). Professionalism of interpretation from community interpreting perspective. *The Journal of Translation Studies, 7(1),* 87-103.

Statistics Korea. (2022). *Statistics related to the populations of immigrant wives in South Korea.* http://www.index.go.kr/potal/main/EachDtlPageDetail.do?idx_cd=2819

Valero-Garcés, C. (2014). *Communicating across cultures: A coursebook on interpreting and translation in public services and institutions*. University Press of America.

Appendix

Appendix A. Statement list and factor arrays.

N.	**Statement** The translation and interpretation curriculum…	**Factor 1**	**Factor 2**
1	…should include content on child protection.	0	2
2	…should include content on child understanding.	0	2
3	…should include ways to make a positive impression on the recipient of the service.	3	1
4	…should include information on ways to communicate well between parents and children.	-3	1
5	…should include a multicultural understanding component.	4	4

6	…should include training to improve accurate and natural use of the Korean language at the advanced level.	5	1
7	…should include technical content for interpretation and note-taking.	2	-1
8	…should include hands-on practice.	-1	2
9	…should include consideration of meaningful case-studies.	2	0
10	…should teach simultaneous interpretation.	3	3
11	…should include theory of translation and interpretation.	-2	-1
12	…should include analysis of how to solve problematic cases.	-1	0
13	…should include training about medical terminology.	3	5
14	…should include training about legal terminology.	2	3
15	…should teach how to create a comfortable atmosphere for counselling.	1	4
16	…should include content to improve counselling skills.	1	0
17	…should teach what to pay attention to when counselling.	-1	3
18	…should teach how to use a Korean word processor.	1	-2
19	…should include content about official documents.	-4	0
20	…should include training on how to use Excel.	-2	-4
21	…include ways to get along with coworkers.	-3	-2

22	…should teach understanding within the Korean workplace culture.	1	-2
23	…should include formal email writing instruction.	-4	-5
24	…should include basic Korean language training skills.	4	-3
25	…should include training about Korean neologism and slang.	-5	-1
26	…should include ethics education.	-3	-3
27	…should include content that prevents cheating for personal gain.	0	-2
28	…should include training to understand people's needs.	0	1
29	…should include training to understand multicultural families	-2	2
30	…should include theoretical content on immigration.	0	0
31	…should be taught in both online and offline modes.	-1	-3
32	…should be taught by highly qualified instructors.	-2	-1
33	The assessment method of the translation curriculum should be changed.	0	-4
34	…provide opportunities for plenty of feedback.	2	0

Appendix B. Factor loadings.

Q sort	**Factor 1**	**Factor 2**
Juhui1	*0.8008	0.2783
Yujin1	0.1973	*0.6421
Sora1	*0.8535	0.0264

Juhui2	*0.6547	0.4408
Yujin2	0.0506	*0.8334
Sora2	0.3016	*0.7411
Explained Variance (%)	48	17

Chapter 11

Investigating school principals' viewpoints on languages education

Renata Aliani

Introduction

The teaching of Italian has been part of the Australian education system, and of the Victorian primary school curriculum, for several decades. Worldwide, Australia has the highest number of students learning Italian and its status has gone from that of a language spoken by immigrants to being one of the languages that is most widely taught in Australian schools (Hajek et al., 2022). As the Victorian Government has shifted its approach to language learning from one of quantity and mandated programs where all children from Foundation to Year 10 are to learn a second language by 2025, to one of quality (Tomazin, 2015), defined by frequent lessons conducted entirely in the target language for a minimum of 150 minutes weekly (DET, 2021a; 2021b), this change might impact on how languages education is viewed, and languages programs are implemented in schools.

It has been argued that, as leaders, principals hold a crucial role in the way languages education is maintained and sustained (Menken & Solorza, 2013; 2015) and that their role in implementing policy at the school level is under-researched (Slaughter et al., 2019) and so, focusing on Victorian primary schools that currently offer this language or might have offered an Italian language program in the past, this research aims to gain an understanding of how the principals in these schools view languages education and what they see as challenges for the implementation of this key learning area.

The chapter begins by providing a historical Australian context and then shifts the focus to Victoria and the place of Italian amongst languages that are widely taught in primary schools. The reason for choosing Victorian primary schools was two-fold – first, Italian programs have a very strong presence in this state where they begin in the Foundation year[25] (Morgan et al., 2021), and second, the decisions about location and year levels was based on a personal and professional interest and the fact that, in 1983, I was one of the first 50 language teachers appointed to teach languages in Victorian schools.

[25] The first, compulsory year of schooling.

Background

Whilst each Australian state and territory has its own education department, a shared priority of schooling for all Australian states and territories is to promote excellence and equity and enable students to develop knowledge and understanding in a range of key learning areas that include languages (Education Services Australia [ESA], 2019). This notwithstanding, with no current national Australian policy, languages education is realised in diverse ways in each state and territory (Kohler, 2017).

Languages education in Australia

Constitutionally, each Australian state and territory has an obligation toward school education and the responsibility that students develop an appreciation toward linguistic diversity (ESA, 2019; MCEECDYA, 2005, 2008), but this approach has not always been in place because the way Australians view languages education - the maintenance of a first language or the learning of a second or subsequent languages - has changed over time.

Supportive during European settlement, people's perspectives about speaking and learning other languages shifted towards an assimilationist stance and a 'White Australia' policy post-World War Two.

During the 1970s and 1980s, there was a move towards a more multicultural approach (Clyne, 2005; Fordham & CMES, 1985). This shift in views was accompanied by languages becoming a part of the Australian curriculum and the broader community recognising the benefits of cultural and linguistic diversity (Bavin & Wales, 1988; Clyne, 1991; Di Biase & Dyson, 1988). The 1970s and 1980s marked a period of significant social change. During this time, there was strong emphasis on social justice, leading to the recognition of the linguistic needs of migrant children. The implementation of the *National Policy on Languages* as proposed by Lo Bianco in 1987, played a vital role in supporting young Australians maintain their first language or learn an additional one. This policy had a substantial impact at the primary level, promoting large-scale teaching of languages spoken within the Australian community as well as those languages considered important for economic, geographic, or political reasons (Liddicoat et al., 2007; Lo Bianco, 1989).

In 1991 Dawkins introduced the *Australian Language and Literacy Policy* which emphasised 14 priority languages and had a special focus on Asian languages. Unable to teach all languages across Australia, each state and territory had to choose eight priority languages. In Victoria the selection included four European (French, German, Greek and Italian) and four Asian languages (Chinese, Indonesian, Japanese and Vietnamese). In many schools this meant

the introduction of, or a change to, teaching an Asian language (Erebus Consulting Partners, 2002).

Presently, the Australian Curriculum (ACARA, 2021) sets the goals and curriculum content for all students from Foundation to Year 10, and the framework also influences how states and territories approach languages education (Kohler & Curnow, 2014). The absence of a current national languages policy has resulted in states and territories contributing to the languages education landscape differently. and Victoria is recognised as having the most comprehensive and well-supported language education policy among all states and territories (Kohler, 2017).

The Victorian languages education context

In Victoria, during the 1970s and 1980s there was a strong emphasis on multiculturalism, leading to state policies that recognised the diverse linguistic backgrounds in Victorian schools. Reports to the Victorian Minister of Education in 1984 and 1985 highlighted the benefits of learning languages, Ministerial policies were designed to ensure equal educational opportunities for all students (Fordham, 1984; Ministry of Education, 1986) and included the formal appointment of language teachers in primary schools (Fordham & CMES, 1985; State Board of Education & MACMME, 1984).

The Victorian Government's commitment to languages education was also evidenced in later ministerial publications (DSE, 1994; DSE & MACLOTE, 1993). and, since 1991, the Department of Education and Training (DET) has collected comprehensive data on the provision of languages programs in the state on an annual basis [26].

Three decades later, policy documents in Victoria show that, at the time, the state had the "highest participation rate in language education" (State of Victoria, 2013, p. 4) among all Australian states and territories. Furthermore, the most recent Victorian languages education policy mandates the study of a language from Foundation to Year 10 in all Victorian schools (DET, 2021a).[27]

In Victorian primary schools, which include students from Foundation to Year 6, language programs are diverse. The majority of enrolments (94.4%) are in traditional programs

[26] The annual LOTE reports can be found here https://www2.education.vic.gov.au/pal/languages-education/guidance/languages-data-and-research

[27] In Victoria, education is compulsory for students aged from 6 to 17 years. Primary school students are aged between 5 and 12 years old and classes are divided into Foundation (Prep) and Years 1 to 6.

where languages are taught as separate subjects., There is a growing participation rate (4.8%) in Content and Language Integrated Learning (CLIL) programs, where content from various curriculum areas are taught in the target language. The smallest percentage of enrolments (0.8%) is in programs that offer partial immersion bilingual education for more than 7.5 hours per week [28] (DET, 2021b).

The place of Italian in Victorian primary schools

The role of languages, particularly Italian, within the Australian school curriculum has evolved and the teaching of this language has transitioned from primarily serving the needs of a large migrant community to becoming an integral part of mainstream education (Hajek et al, 2022). This transformation has led to Australia having the highest number of students learning Italian among English-speaking countries (MACEI, 2019).

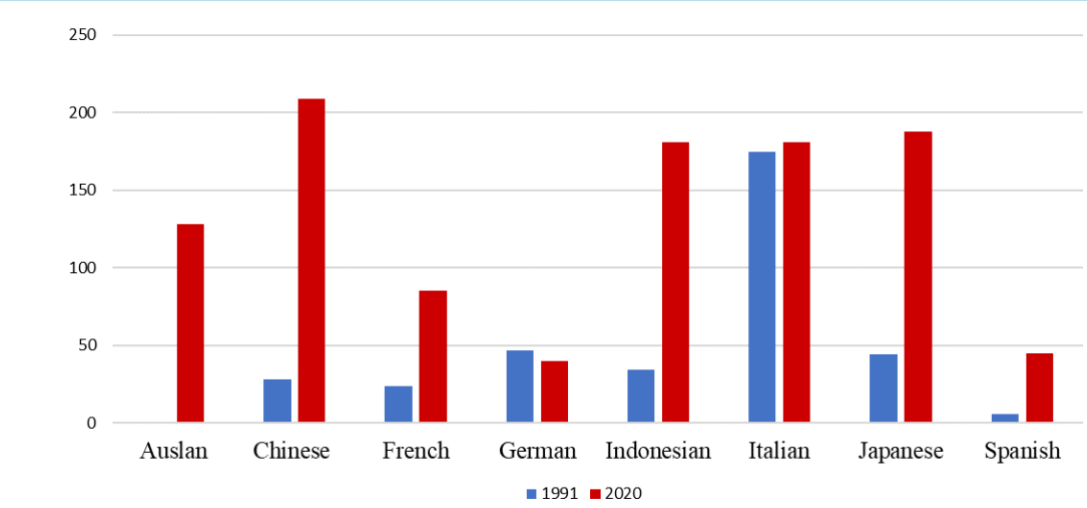
In the 1980s and 1990s, Italian was notably more prevalent compared to other languages taught in Victorian primary schools. The initial disparity in numbers can be attributed to the efforts of CoAsIt, a Melbourne-based Italian welfare organisation, which had been delivering 'after hours' language classes from 1968 and gradually started to offer lessons during school hours through 'insertion programs'. This meant a larger pool of Italian language teachers was available when primary schools began to offer languages more widely (Hajek et al, 2022), but it also left, in many schools, the lingering notion that Italian could be taught in one hour a week as it had been though insertion classes.

As the number of Victorian schools offering language programs has steadily risen to meet government-set targets, a comparison between the number of primary schools that chose to teach one of these eight languages in 1991 and the most recent data for the same languages reveals an interesting trend. Figure 1 demonstrates that while Italian has not experienced the same growth in program numbers as all the other languages (except German, which has seen a decline in the number of schools offering it), Italian has retained a high number of language programs over time.

Figure 1. Comparison of primary schools teaching top 8 languages in 1991 and 2020.

Victorian primary schools - Comparison of schools teaching top 8 languages in 1991 and 2020

[28] Designated bilingual programs are allocated additional annual funding.



Sources: DET, LOTE Reports, 1991-2020

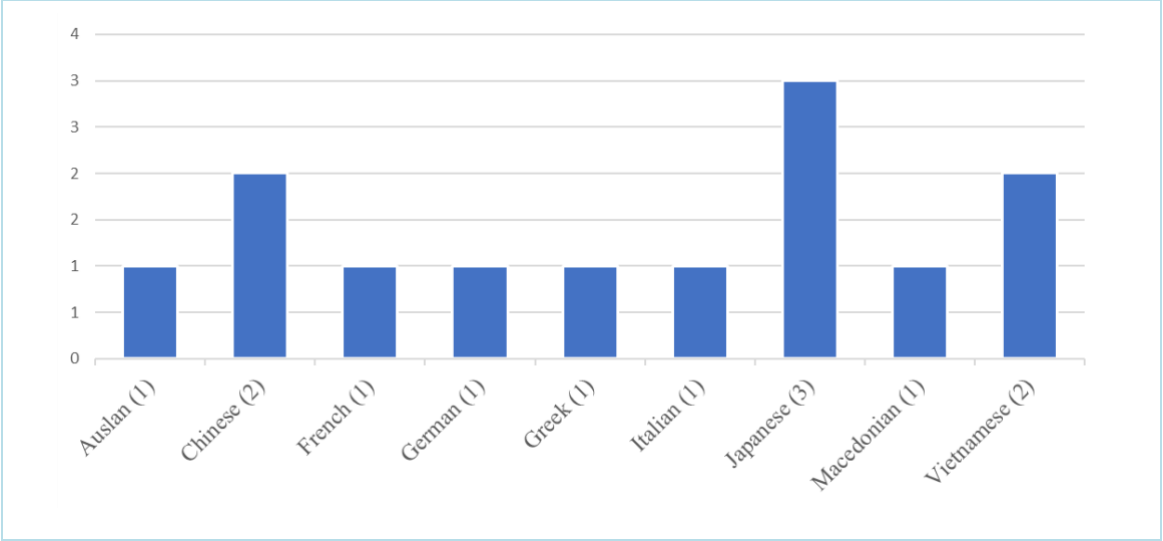
This observation suggests that a significant number of schools have maintained their Italian language programs over an extended period. However, it also implies that some schools have transitioned to teaching another language and many schools have opted for a language other than Italian when introducing language programs in more recent times.

While they represent a relatively small percentage of the total, there are 13 programs that deliver up to 50% of the curriculum in the target language in 11 primary schools designated as bilingual. With two schools offering programs in two languages, figure 2 provides an overview of the languages and programs offered in each language through bilingual programs in Victorian schools.

Figure 2. Victorian bilingual programs in 2020.

Victorian primary schools - Bilingual programs in 2020 [29]

[29] Since the completion of the data collection for this study, a second Italian bilingual program was established in Victoria in 2021.



Source: DET, LOTE Report, 2020

Several of these bilingual programs such as, for example, German, Vietnamese, Greek and Macedonian, were established in the 1980s, reflect the community needs during that period and have stood the test of time. In contrast, others, like the Auslan[30] program is more recent. Regarding Italian, although there were two bilingual programs in the early 1980s and one in the 1990s, they were operational for only a few years. The Italian bilingual program that was part of this research began just a decade ago and a second Italian bilingual program was launched in 2021.

Purpose of the study

Variety is a term that best describes the languages programs found in Victorian primary schools. There can be variety in size and demographics, choice of languages and content, different year levels taking part, some schools teach a single language while others deliver multiple programs, the time allocation can range "from 10 minutes to 300 minutes per week" (DET, 2021b, p. 30) and some schools have taught the same language for decades while others have changed over time (Education Victoria, 2020).

Focussing on school principals, because one of their responsibilities is to deliver comprehensive and high-quality programs to all students in their schools (Education Victoria, 2020), and with a particular interest in Italian language programs at the primary level, the following question guided this study:

[30] Auslan (Australian Sign Language) is the language of the deaf community in Australia.

RQ1. What are the viewpoints about languages education held by principals in Victorian primary schools that offer different models of languages programs?

A range of methods such as surveys and focus groups were employed to collect data in recent research about language learning in anglophone countries (Lanvers et al., 2021), and semi-structured interviews were used to identify the views of principals and heads of departments about the sustainability of the languages programs in Australian school (Díaz et al., 2021). What the analysis of the interviews within the Australian context brought to light were recurrent themes rather than viewpoints shared by participants.

At the macro level, some factors that influence educational contexts are policies, teacher education, predominant cultures, and the impact of globalization. On the other hand, at the micro-level the factors include the culture within individual schools, their structures, and the values and beliefs held by crucial stakeholders, including teachers, parents or caregivers, and students. However, whilst understanding the intricate relationship between these macro and micro influences is essential in comprehensively addressing educational dynamics and fostering effective learning environments, stakeholders must be aware of the viewpoints that others hold to reach a common ground and for learning and change to take place.

In the current research, Q methodology was chosen because it can explore the subjective viewpoints of participants and has increasingly been used in educational research to investigate the perspectives, beliefs and characteristics of those in the field of compulsory education (Lundberg et al., 2020). Moreover, this methodology offers "a philosophical and conceptual framework that in tandem with its technical and analytical procedures, provides the basis for a science of subjectivity that is applicable across all humanities and sciences as well as their extensions into public policy" (Brown, 2019, p. 565).

Procedure

The release of the *National policy on Languages* in 1987 is considered "the high point in policy-making for languages in Australia" (Scarino, 2014, p. 291) but, currently, in the field of languages education, there is no explicit policy on languages at the national, Commonwealth, level. Since the 1980s, nonetheless, there have been strategic and planning documents that, whilst not providing a mandate or the same level of commitment, have been used to support practice and the implementation of languages programs in various Australian states. Because of their importance and impact, and the fact that these documents form an aspect of schools' discursive reality, 44 languages policies, plans and strategy documents spanning thirty years formed the concourse from which an initial 265 statements, falling under several broad and

recurring themes, were drawn. These statements were then reduced to a comprehensive and representative Q sample of 48 statements (see appendix A).

The full data set was collected as part of my PhD study *Sì, tanti ma non bilingui: Using Q methodology to examine Italian language teaching in primary schools* (Aliani, 2021), where the P set comprised principals, classroom teachers, language teachers primarily of Italian but also including other languages, and parents. Also, as well as Victorian primary schools, the original data set included participants from schools in South Australia (SA) and in the Australian Capital Territory (ACT). In the current work, the focus is totally on Victorian primary schools and the sixteen principals that form the P set for the Victorian cohort**.**

The sixteen schools are located in the North-Western Region of Melbourne, an area that has the highest number of Italian programs, both historically and currently. One of the schools offers an Italian bilingual program, the remaining fifteen deliver second languages programs, nine in Italian, three in Italian and other languages, and the last three schools had an Italian program in the past but are now teaching other languages. Because it was important to select diverse settings where a range of viewpoints may be found, an audit of all Victorian primary schools in the N-W region that had taught or were currently teaching Italian was carried out and information about the language program schools offered was collected through Web searches and direct contact with the schools in the N-W region. The information gathered through the searches indicated that the schools offered a range of programs– bilingual, offering substantial time or content, delivering less-intensive programs, recently started, offering multiple languages or schools that had Italian in the past but were now offering 'other' languages, and labels describing the programs were created as criteria to select and invite schools to participate in the research.

The participating principals completed a manual Q sort using paper cards and, post sort, they answered in writing follow up questions about why they had selected the statements they had placed at the two poles (+5 and –5) and, if applicable, commented on – 1) positive aspects of the current language program at their school, 2) challenges for the program, 3) an aspect they wanted to change, and 4) described their 'ideal' language program. These principals also took part in a one-on-one semi-structured interview which sought to gather the school's profile and details about the language(s) offered, further identify positives and challenges to their programs and comments on what, for them, makes a 'quality' language program.

The collected Q sorts were entered in KADE (Banasick, 2019) for analysis and using Principal Component Analysis (PCA) and Varimax rotation, two factors were extracted. The interviews were transcribed and entered in NVivo for thematic analysis and the post sort

comments were entered in Excel and thematically coded so that they could easily be incorporated into the interpretation of the viewpoints about languages education held by this group of principals.

Analysis and interpretation

The analysis revealed that two distinct viewpoints are present among this group of principals with twelve sharing the first perspective and four the second. Salient features of the schools and languages programs are included in the interpretation of each viewpoint as are some of the comments made by the principals.

Viewpoint 1 - Idealistic

Twelve principals share the first perspective about languages education which accounts for 33% of the explained variance. The context in which these participants work is varied. A single language program is offered in eleven schools with Italian taught in nine and Japanese in two. Only one school offers multiple languages (Chinese and French) but in another school where Italian is taught, lunchtime elective sessions are held for Chinese and French. Most of these schools have delivered languages programs for many years. Six schools have taught Italian for a long time (between 17 and 22 years), but this was a new experience in two schools which had established their Italian program only 1-2 years prior to data collection, and one school which had taught Italian for 15 years has returned to teaching this language after a 5-year break. For the three schools teaching languages other than Italian, of the two that are now teaching Japanese one had stopped teaching Italian in 2009 and one in 2010, and the last school stopped teaching Italian and Greek in 2009 and began teaching Chinese and French. The time allocation for languages in these twelve schools ranged from 45 minutes to 7-8 hours per week. Some programs offered languages as a separate subject, some offered content-based programs and one school offered a bilingual program. Table 2 summarises this information for the schools where the principals hold the first viewpoint. The factor loadings represent the extent to which each participant holds the viewpoint shared by this group.

Table 2. Features of schools where principals hold the first viewpoint.

ID	*Loading*	*Program*	*Current Languages*	*Years*	*Notes & Prior language programs*

P-2	0.7645	Substantial	Italian	17	Chinese & French at Lunch Time Clubs
P-13	0.7547	Less intensive	Italian	19	
P-8	0.7413	Substantial	Italian	19	
P-4	0.7342	Other	Chinese & French	11	CLs - Turkish, Greek & Italian prior (from the 1980s)
P-12	0.6747	Other	Japanese	8	CLs - Arabic, Turkish, Greek & Italian prior (since the 1980s)
P-1	0.6515	Bilingual	Italian	22	
P-10	0.6508	Other	Japanese	6	Italian 2000-2009 Indonesian in the 1990s
P-6	0.6335	Recent	Italian	2	Italian in 1995-2007 & 2008-2010
P-15	0.6068	Recent	Italian	2	Japanese 2010-2012 Indonesian 2001-2009 Japanese 1990s-2000
P-3	0.5841	Most time	Italian	21	
P-14	0.5776	Recent	Italian	1	Indonesian 1990s-2010
P-7	0.4002	Substantial	Italian	21	

The principals sharing this first viewpoint believe that in the 21st century it is extremely important to ensure students have access to quality language programs (26, +5). Even if English is considered an international language, they see the point of learning languages (34, -5) as it offers significant benefits not only for the students and their families but the community as well (4, +2). Some of these principals explain these points in more detail[31]:

[31] In the quotes made by the participating principals, the referencing includes the participant's id number, the label describing the program offered at the school and the language(s) taught.

> There are very many reasons to study a language other than English, whether or not English is a dominant global language. (P-13, Less intensive, Italian)
> English is important but no more so than the benefits accruing (cognitive, social, global and linguistic) from second language learning. (P-4, Other, Chinese & French)
> The benefits of language learning go far beyond the benefits of travel - the cognitive benefits and transfer of skills are highly beneficial. (P-6, Recent, Italian)
> Language learning enhances overall cognitive development to equip children better for the future. (P-1, Bilingual, Italian)

These participants do not believe that focusing on English alone supports literacy (27, -4) nor do they consider that adding languages to the curriculum detracts from the time needed for literacy and numeracy development (20, -4). This aspect is further elaborated by one of the principals:

> Learning more than one language at the same time, I do not think is detrimental to learning English. It doesn't hold you back at all. When you're learning, you see the similarities, not just in words that we use in English that have come from the language, but in grammar, learning a different grammar. (P-14, Recent, Italian)

On the contrary, these principals believe that learning languages strengthens literacy-related capabilities which are transferable across learning areas (42, +5) and that bilingualism leads to better cognitive skills (36, +4). As one principal explains:

> Evidence demonstrates this to be so – learning a different language will help children develop literacy skills. (P-13, Less intensive, Italian)

For these principals, languages are for all students (22, -5) and, in their opinion, a further benefit of learning a language is that it inspires interest in and respect for other cultures (19, +3). As one principal asserts:

> The learning of another language helps to build inclusiveness and respect for other cultures – assists on building tolerance and is one of a teacher's core roles. Learning another language is a great 'leveller'. (P-8, Substantial, Italian)

In general, while they do not want to see the number of bilingual programs double every three years (32, -4) this group of participants feels the teaching of languages at the primary level should be substantially increased (15, +3), with one of the principals who had experience of bilingual education stating that:

> Immersion is proven to be the most effective way to learn a language. (P-1, Bilingual, Italian)

Acknowledging that a shortage of qualified languages teachers is an obstacle to providing languages learning for all students (47, +1), the availability of qualified teachers with the appropriate level of competence in the target language is important to this group of principals (9, +3), with one person indicating that:

> These are probably the biggest blockers to language learning. (P-10, Other, Japanese)

In summary, the principals that share this first viewpoint believe in the benefits - linguistic, cognitive and cultural – inherent in language learning and acknowledge the place of languages education within the primary school curriculum. Valuing languages, they consider they have a responsibility to provide all students with quality languages programs which are well resourced and where qualified, linguistically proficient teachers are an important element. As the principal in a recently established Italian program affirmed:

> Resourcing a languages program that is (equally) compatible with other learning areas in the school ensures that a clear message is sent to all that Languages is highly valued in the school. To build any program in a school to a highly effective level, it needs to be resourced. The key to the success of the program is - 1) An effective teacher, and 2) strongly supported by staff, students and parents. (P-15, Recent, Italian)

Viewpoint 2 - Pragmatic

Four principals share the second viewpoint about languages education, which accounts for 33% of the explained variance. In these four schools, languages have been taught for a considerable time. Three schools have been teaching languages for over 20 years while at one school which had a history of using on-line programs in the 1990s, the current on-line programs in a range of languages are a more recent addition. Only one of these four schools offers a single language

(Italian), while the others offer multiple languages – Italian, Greek and Chinese at one school, Italian, Greek and Turkish at another, and on-line Italian, Chinese, French, German and Japanese programs at another school. Table 3 summarises this information for the schools where the principals hold the second viewpoint.

Table 3. Features of schools where principals hold the second viewpoint.

ID	*Loading*	*Program*	*Current Languages*	*Years*	*Notes & Prior language programs*
P-11	0.7415	Less intensive	Italian	21	CoAsIt[32] classes in the 70s & 80s
P-9	0.6159	Multiple	Italian, Chinese, French, German & Japanese	4	On-line Indonesian, on-line in the 90s
P-5	0.5354	Multiple	Italian, Greek & Turkish	21	
P-16	0.5196	Multiple	Italian, Greek & Chinese	22	

The principals sharing the second perspective are of the opinion that effective languages programs require the support of the whole school (28, +4). They also strongly believe students will learn most effectively through lessons in the target language (43, +5) so, for them, the availability of qualified and linguistically proficient teachers is of the utmost importance (9, +5). One principal elaborating on the use of the target language stated:

> I believe that if we are to teach students effectively and to achieve the desired outcomes, immersing children in language will increase the rate of learning not just in the language being taught but any other known languages (literacy). (P-11, Multiple, 5 languages on-line)

These principals do want education authorities to ensure only qualified specialists are appointed (31, +2) and they, like the other group, see a shortage of qualified languages teachers

[32] CoAsIt – Italian Assistance Association - is a charitable institution that, since 1968, has been promoting Italian language and culture in Australia through programs funded by the Italian and the Australian Federal Government. https://www.coasit.com.au

as a major obstacle to providing languages to all students (47, +4). One of the principals further indicated that the shortage of qualified teachers was a:

> Major resourcing issue which makes it hard to deliver languages across all year levels. (P-9, Less intensive, Italian)

Other aspects that the cohort of principals holding the second viewpoint deems important for effective languages programs are time, at least three hours per week (5, +3), and continuity of study to achieve proficiency (25, +3). These principals do see the point of languages education (34, -5) and believe all students, not only the academically able ones, should learn a language (22, -5). Two principals further elaborate:

> Learning languages is important for <u>everyone</u>. (P-11, Multiple, 5 languages on-line, emphasis in original)

> In terms of languages education, if you value it, you will offer other options to learn a language. (P-5, Multiple, Italian, Greek & Turkish)

This cohort remains neutral or uncertain about who should influence the choice of language (33, 0). They do not want to see Asian Languages or Asian Studies prioritised in Australian schools (18, -4; 21, -3), and do not consider that knowing the languages of our key regional partners is vital (8, -4). Looking specifically at the learning of Italian, these principals do not believe it provides a background for further studies in Romance languages (48, -3,) and they remain neutral or uncertain about Italian being a relatively easy language to learn (40, 0). This group of participants is of the opinion that it is not valuable for schools to aim to offer at least one European and one Asian language (45, -4). Three of these schools teach multiple languages and believe that:

> Learning languages is important for <u>everyone</u>. Priority should not be given to the type of person or to a particular language. (P-11, Multiple, 5 languages on-line, emphasis in original)

In summary, the group of principals sharing the second viewpoint do not wish to have any one language prioritised and are very clear about what factors ensure languages programs are

successful. They consider whole school support, qualified and proficient teachers, time on task, continuity of study and the use of the target language as key elements. In fact, the importance of students being immersed in the language is specifically mentioned by these four principals and they consider:

> The ideal language program should be immersed into a number of different learning areas so that children are continually exposed to the language and are immersed in the language. (P-11, Multiple, 5 languages on-line)

Consensus

Although the analysis shows that two different viewpoints about languages education are held by these principals, the first being more ideologically based and the second being more pragmatic, some shared areas of agreement are also found. With regards to implementation, participants agree that schools need to plan languages programs that are strongly and widely supported (11, +3 & +4) because parental and community engagement is one of the most important factors in a student's educational success (35, +4 & +3). The importance of this for both groups of principals is explained by the following statements, the former from a principal sharing the first viewpoint and the latter from a principal sharing the second:

> No school program will reach its potential without the support of the school administration. If the school community has a voice, it will back a program and work for its success. An effective language program is one that the whole school is involved in - Teachers (class) need to be learning with the students - following up lessons. (P-6, Recent, Italian)

> Programs in schools should be supported by the community for them to reach their potential. It is well known that a student's success is dependent on school/family partnerships. (P-5, Multiple, Italian, Greek & Turkish)

Moreover, while there is amongst this group a degree of neutrality about authorities establishing more bilingual programs (13, -1 & 0), there is very strong agreement that languages should be studied (34, -5 & -5) especially because they are integral to the curriculum (41, +4 & +2) and, like all other key learning areas, need to be resourced appropriately (44, +2 & +3). There is common agreement that languages should be:

> Integrated across the curriculum with adequate support and program planning. A whole school commitment with full support of the school council. (P-2, Substantial, Italian Plus Electives)

Discussion and conclusion

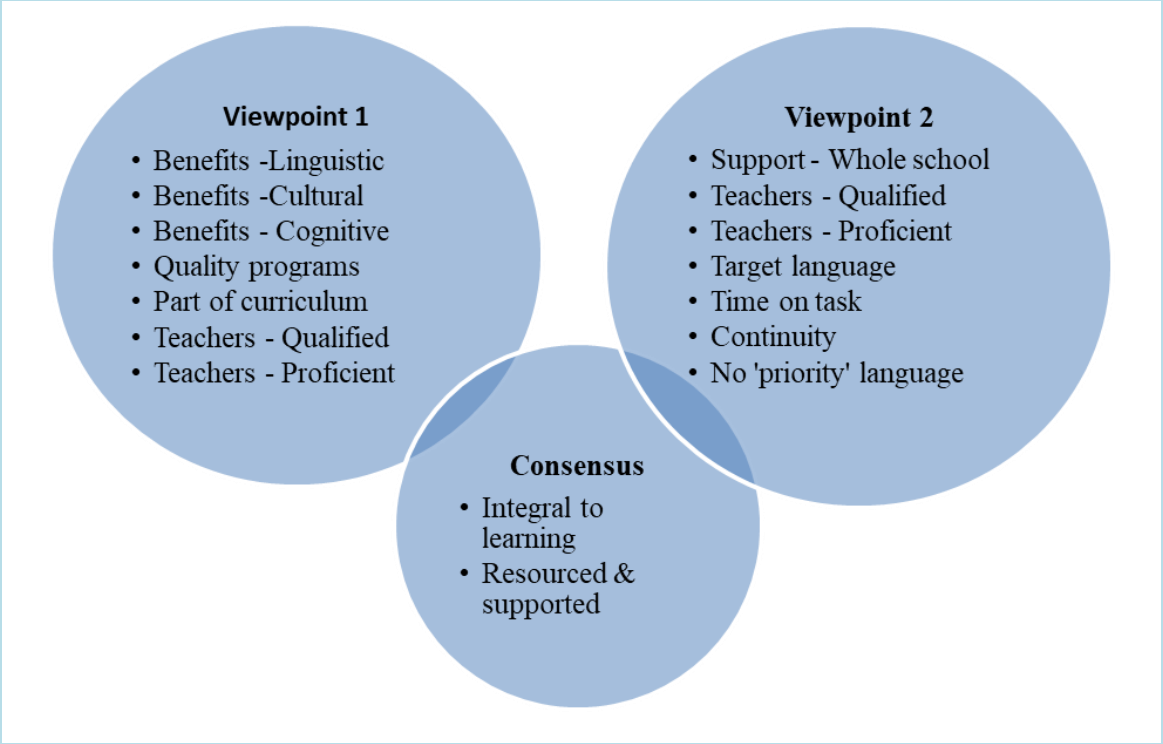
Focusing on languages education at the primary level, this research used Q methodology to identify the viewpoints held by principals in Victorian primary schools. The analysis of the Q sorts found two viewpoints present among a cohort of sixteen principals, and data gathered through post-Q sort questions and interviews, supported the findings and enriched the descriptions of these two perspectives.

Both viewpoints were positive towards languages education and there was consensus among all participants that languages are integral to learning and need to be well resourced and widely supported. That languages are viewed positively across the cohort may be because this learning area has been part of the Victorian primary curriculum for four decades and so languages are, or at least appear to be, accepted by school leadership.

Regardless of the languages taught, everyone acknowledged the importance of qualified and linguistically proficient teachers. This aspect, however, was of the utmost importance for the four principals who shared the second viewpoint and, when describing their 'ideal' language program, three of the four mentioned 'immersion' in the target language. Figure 3 shows the aspects that distinguish each viewpoint and the elements in common.

Figure 3. Distinguishing and consensus elements.

Comparison of what distinguishes and is common to each viewpoint



Reflecting on the aspects that are specific to the first viewpoint, these are ones most often mentioned when making a traditional or more theoretical argument for languages – the benefits, whether they be linguistic, cultural or cognitive, the place of languages within the school curriculum and offering quality programs delivered by quality teachers. The participants who share the first viewpoint are accepting and supportive of languages education and recognise the benefits that will enhance students' learning. For a long time, people have focused on the benefits of languages learning as an argument to support and promote the implementation of languages in schools and these may be the aspects that first come to people's minds when talking about languages education.

The aspects that are specific to the second viewpoint, on the other hand, are far more pragmatic in nature. This group of principals wants to provide students with a solid learning foundation, ideally through immersion, and they take into consideration not only the use of the target language but also the time allocated to the program and the continuity from primary to secondary. Moreover, they consider teachers are crucial in such programs as is the support of the whole school. Of note among the cohort of principals in the current research, is that those who share the second viewpoint do not prioritise one language over another and three of the four schools offer multiple language programs. It is also worth noting that, apart from the principal from the bilingual program who recognised how effective immersion was when learning a language, the importance of teachers using the target language and having students

immersed in the language they are learning, was only prioritised by the small group of principals who share the second viewpoint.

In three of the participating schools, the original Italian program has changed to a new 'other' language but, notwithstanding, all participating schools have a long tradition of teaching languages, so it is not unexpected that, overall, languages education is an accepted part of the curriculum in these sixteen schools. Being accepted, however, does not necessarily mean that languages are prioritised.

Also not unexpected, is the importance afforded to the use of the target language and to teachers in the delivery of languages programs because – 1) the benefits of using the target language across the curriculum through CLIL or bilingual programs are well-established (Truckenbrodt & de Courcy, 2002; Turner, 2019), and the Victorian government is now supporting the implementation of CLIL programs and allocating extra funding to schools that are prepared to implement bilingual programs (DET, 2021a), and 2) to teach languages teachers must hold a Victorian Institute of Teaching (VIT) registration but an alternative authorisation - Permission to Teach (PTT) - can be granted in special cases such as workforce shortages (DET, 2021a). The importance of qualified and linguistically proficient teachers that can teach languages across the curriculum was mentioned by the sixteen principals but was emphasised by the group of principals who share the second viewpoint indicating that the training or retraining of teachers to ensure bilingual or CLIL programs are appropriately staffed cannot be overstated and is seen as crucial in the long-term planning for effective languages education in Victoria.

The fact that two viewpoints were identified does not preclude the presence of other perspectives amongst principals. For example, previous research (Slaughter et al., 2019) has shown that, when committed, principals can be highly creative in resourcing and delivering languages programs despite the challenges they may face. Moreover, principals do not work in a vacuum, and they will make decisions in consultation with others such as the executive team, leading teachers, and school council and changes in policy directives, funding and increased autonomy also impact on decisions taken by schools.

Having answered the research question about which viewpoints about languages education are held by principals in Victorian primary schools that offer different models of languages programs this Q study has also been able to identify the presence of a small group of principals who, because of their more pragmatic stance, may be more open to introducing a program where the target language is prioritised and used as the medium of instruction such as in a CLIL or in a bilingual program and where teachers must be linguistically proficient to be

able to teach in this way. Knowing the viewpoints that are present in schools and in particular identifying principals who can be creative in their approach to delivery but more importantly really prioritise languages and the use of the target language across the curriculum, will help identify the schools that are prepared to move from quantity to quality.

References

Australian Curriculum Assessment and Reporting Authority [ACARA]. (2021). Sydney, NSW, Australia: ACARA. https://www.australiancurriculum.edu.au/

Aliani, R. (2021). *Sì, tanti ma non bilingui: Using Q methodology to examine Italian language teaching in primary schools.* (PhD Doctoral dissertation), The University of Melbourne, Carlton, Vic. Retrieved from http://hdl.handle.net/11343/258782

Banasick, S. (2019). KADE: A desktop application for Q methodology. *Journal of Open Source Softwar*e *4*(36). https://doi.org/10.21105/joss.01360

Bavin, E.L., & Wales, M.L. (1988). *Language programs in primary schools: Some Australian experiences*. Deakin University Press.

Brown, S. R. (2019). Subjectivity in the human sciences. *The Psychological Record, 69*(4), pp. 565-579. https://doi.org/10.1007/s40732-019-00354-5

Clyne, M. (1991). Overview of 'immigrant' or community languages. In S. Romaine (Ed.), *Language in Australia* (pp. 215-227). Cambridge University Press.

Clyne, M. (2005). *Australia's language potential*. UNSW Press.

Dawkins, J. (1991). *Australia's language: The Australian language and literacy policy*. Australian Government Publishing Service.

Department of Education and Training [DET]. (2021a). *Languages education*. https://www2.education.vic.gov.au/pal/languages-education/policy

Department of Education and Training [DET]. (2021b). *Languages provision in Victorian Government schools, 2020*. https://www2.education.vic.gov.au/pal/languages-education/guidance/languages-data-and-research

Díaz, A., Cordella, M., & Ramos, F. (2021). Resistance to monolingualism: School principals and head of languages' voices on factors that promote and deter languages education in Queensland, Australia. In U. Lanvers, A. S. Thompson, & M. East (Eds.), *Language learning in Anglophone countries: Challenges, practices, ways forward* (pp. 485-502). Springer International Publishing.

Di Biase, B., & Dyson, B. (1988). *Language rights and the school: Community language programs in primary schools in Australia*. Inner City Education Centre.

Directorate of School Education [DSE]. (1994). *Ministerial advisory council on Languages Other Than English (MACLOTE) report to the Minister for Education.* Melbourne, Vic, Australia: DSE.

Directorate of School Education [DSE] & Ministerial Advisory Council on Languages Other Than English [MACLOTE]. (1993). *Languages Other Than English Strategy Plan.* Melbourne, Vic, Australia: DSE.

Education Services Australia [ESA]. (2019). *The Alice Springs (Mparntwe) Education Declaration.* Council of Australian Governments Education Council. Carlton South, Victoria, Australia: Education Council Secretariat. www.educationcouncil.edu.au.

Education Victoria. (2020). *Roles and responsibilities — teaching service*. https://www2.education.vic.gov.au/pal/roles-and-responsibilities-teaching-service/policy-and-guidelines/principals

Erebus Consulting Partners. (2002). *Evaluation of the National Asian Languages and Studies in Australian Schools Strategy*. Department of Education, Science and Training, Commonwealth of Australia. https://www1.curriculum.edu.au/nalsas/pdf/evaluation.pdf

Fordham, R. (1984). *Ministerial Paper Number 6: Curriculum Development and Planning in Victoria.* Department of Education. Melbourne, Vic, Australia: FD Atkinson Government Printer.

Fordham, R., & Child Migrant Education Services [CMES]. (1985). *The implementation of bilingual and community language programs in primary schools*. Melbourne, Vic, Australia: Materials Production, Curriculum Branch, Education Department of Victoria.

Hajek, J., Aliani, R., & Slaughter, Y. (2022). From the periphery to centre stage: The mainstreaming of Italian in the Australian education system (1960s to 1990s). *History of Education Quarterly*. doi: 10.1017/heq.2022.30.

Kohler, M. (2017). *Review of languages education policies in Australia.* Department for Education. Adelaide, South Australia: Government of South Australia. https://www.education.sa.gov.au/sites/g/files/net691/f/melc-review-of-languages-education-policies-australia.pdf?v=1531721557

Kohler, M., & Curnow, T.J. (2014). *Attachment 1: Policy and literature review - senior secondary languages education research project.* Centre for Languages and Cultures University of South Australia. Retrieved 2017/07/31, from: https://docs.education.gov.au/documents/attachment-1-policy-and-literature-review

Lanvers, U., Thompson, A. S., & East, M. (Eds.). (2021). *Language learning in Anglophone countries: Challenges, practices, ways forward*. Springer International Publishing.

Liddicoat, A.J., Scarino, A., Curnow, T.J., Kohler, M., Scrimgeour, A., & Morgan, A.-M. (2007). *An investigation of the state and nature of languages in Australian schools.* Canberra, ACT, Australia: Commonwealth Government of Australia. Retrieved 2019/12/04, from: https://webarchive.nla.gov.au/awa/20080401023459/http://pandora.nla.gov.au/pan/82870/20080401-1209/www.dest.gov.au/NR/rdonlyres/82B80761-70BD-47A6-A85A-17F250E11CBA/20743/SNfinalreport.pdf

Lo Bianco, J. (1987). *National policy on languages*. Australian Government Publishing Service. https://doi.org/10.1075/aral.10.2.03bia.

Lo Bianco, J. (1989). *Languages Action Plan.* Ministry of Education.

Lundberg, A., de Leeuw, R., & Aliani, R. (2020). Using Q methodology: Sorting out subjectivity in educational research. *Educational Research Review*, 100361. https://doi.org/10.1016/j.edurev.2020.100361

Menken, K., & Solorza, C. (2013). Where have all the bilingual programs gone?!: Why prepared school leaders are essential for bilingual education. *Journal of Multilingual Education Research, 4*(1), 3.

Menken, K., & Solorza, C. (2015). Principals as linchpins in bilingual education: The need for prepared School leaders. *International Journal of Bilingual Education and Bilingualism, 18*(6), 676-697.

Ministerial Council for Education Early Childhood Development and Youth Affairs [MCEECDYA]. (2005). *National Statement and Plan for Languages Education in Australian Schools 2005-2008.* Department of Education and Children's Services, State of South Australia. http://www.curriculum.edu.au/verve/_resources/languageeducation_file.pdf

Ministerial Council for Education Early Childhood Development and Youth Affairs [MCEECDYA]. (2008). *Melbourne Declaration on Educational Goals for Young Australians.* MCEECDYA. http://www.curriculum.edu.au/verve/_resources/National_Declaration_on_the_Educational_Goals_for_Young_Australians.pdf

Ministero degli Affari Esteri e della Cooperazione Internazionale [MACEI]. (2019). *L'italiano nel mondo che cambia: Stati generali della lingua italiana nel mondo*. Palazzo Firenze

Ministry of Education. (1986). *Education in, and for, a multicultural Victoria.* Ministry of Education, Schools Division, Curriculum Branch.

Morgan, A.-M., Scrimgeour, A., Saunders, S., & Farmer, K. (2021). *Altitude and amplitude: The case for a blue-sky blueprint for languages education in Australia - National languages plan & strategy discussion Paper*. https://afmlta.asn.au/wp-content/uploads/2021/10/Discussion-Paper-National-Languages-Plan-and-Strategy-2021.pdf

Scarino, A. (2014) Situating the challenges in current languages education policy in Australia: Unlearning monolingualism, *International Journal of Multilingualism, 11* (3), pp. 289-306, DOI: 10.1080/14790718.2014.921176.

Slaughter, Y., Lo Bianco, J., Aliani, R., Cross, R., & Hajek, J. (2019). Language programming in rural and regional Victoria: Making space for local viewpoints in policy development. *Australian Review of Applied Linguistics, 42*(3), 274-300. doi:10.1075/aral.18030.sla

State Board of Education, & Ministerial Advisory Committee on Multicultural and Migrant Education [MACMME]. (1984). *Discussion Paper: The Place of Community Languages in Victorian Schools.* State Board of Education Victoria.

State Board of Education, & Ministerial Advisory Committee on Multicultural and Migrant Education [MACMME]. (1985). *Report to the Minister for Education: The place of Languages Other Than English in Victorian schools.* State Board of Education Victoria.

State of Victoria [SoV]. (2013). *Languages: Expanding your world: Plan to implement the Victorian Government's vision for languages education 2013-2025.* DEECD.

Tomazin, F. (2015, 11 October). The language dilemma: Andrews dumps ambitious target for schools, *The Age,* Melbourne, Vic, Australia. http://www.theage.com.au/victoria/the-language-dilemma-andrews-dumps-ambitious-target-for-schools-20151002-gk056l.html

Truckenbrodt, A., & de Courcy, M. (2002). *Implementing a bilingual program*. Association of Independent Schools of Victoria.

Turner, M. (2019). *Multilingualism as a resource and a goal: Using and learning languages in mainstream schools*. Palgrave Macmillan.

Appendix

A. Statements and factor array

#	*Statements*	*Factor Q sort values and Z scores*			
		Factor 1		Factor 2	
1	Schools [should] draw on the widest possible range of resources and partnerships inside and outside the school to support students.	0	0.116	1	0.154
2	Languages are cumulative subjects requiring long study before they can produce a high level of proficiency.	-1	-0.386	1	0.089
3	It is important that schools have autonomy over things that matter most, including curriculum.	-2	-0.615	1	0.221
4	Languages education offers significant benefits for students, their families and the community as a whole.	2	0.873	0	-0.108
5	To operate effectively, a program requires at least three hours spread over the course of the school week.	0	-0.139	3	1.061
6	The study of Italian … provides students with a direct means of access to the rich and varied culture of the many communities around the world for whom Italian is a major means of communication.	-1	-0.173	-2	-0.736
7	The bilingual program does not take time away from other curriculum areas.	-1	-0.428	1	0.335
8	Knowing the languages of our key regional partners is vital to unlocking the potential of the Asian century for Australia.	-2	-0.521	-4	-1.476

9	The availability of qualified languages teaching staff with … the appropriate level of competence in the target language is essential.	3	1.012	5	2.062
10	Learning more than one language has never before been more relevant or important as our everyday lives become more globalised and interconnected.	1	0.548	0	0.001
11	Schools [should] plan a languages program that is strongly supported by the school community, including by the school administration, staff, parents and students and appropriate partnerships.	3	1.098	4	1.524
12	Literacy can be developed in more than one language at the same time.	2	0.715	1	0.265
13	Education authorities should establish more bilingual programs.	-1	-0.319	0	0.027
14	Students of Italian have many opportunities to use the language in everyday life.	-3	-0.835	-1	-0.551
15	The learning of languages at primary school level should be substantially increased.	3	1.12	-1	-0.519
16	It is important to understand the level of proficiency a child is likely to acquire from a languages program and to have realistic expectations of both the child and the program.	0	-0.003	-2	-0.551
17	For English as a Second Language students, learning a third language can be a positive experience because their skills in that language are comparable to the skills of their classmates.	0	-0.107	-2	-0.734
18	Chinese, Japanese, Indonesian and Korean [are] the four Asian languages of most benefit to Australia's economic future. The study of these	-2	-0.741	-4	-1.51

	languages [should] be given priority in Australian schools.				
19	Learning a language inspires interest in and respect for other cultures.	3	0.982	1	0.356
20	Adding languages programs may detract from time needed for literacy and numeracy learning and teaching in schools.	-4	-1.767	-2	-0.686
21	Australian governments [should] promote the study of … Asian languages and Asian studies.	0	-0.15	-3	-1.183
22	Languages are only for academically able students so less able students shouldn't have to do them.	-5	-2.48	-5	-1.695
23	A capability in English only is insufficient despite its status in the world.	0	0.119	-1	-0.524
24	Senior members of a school community are far better equipped to know what is best for their school than government bureaucrats.	-2	-0.717	0	-0.192
25	Continuity of language learning … will contribute significantly to a student gaining proficiency in the language.	2	0.574	3	1.299
26	Providing a comprehensive curriculum in the twenty-first century requires schools to ensure that all students access a quality languages program.	5	1.614	-1	-0.486
27	Achieving literacy is difficult so it is better to focus on English rather than on other languages.	-4	-2.144	-3	-0.841
28	Effective languages programs require whole school support.	2	0.958	4	1.696
29	The important economic, social and community benefits gained from learning languages are not	1	0.527	2	0.797

	widely understood both in schools and the wider community.				
30	Students should acquire proficiency in another language used in the Australian community.	-3	-0.769	0	-0.25
31	Education authorities should ensure that only qualified specialists are appointed to teach languages.	-2	-0.503	2	0.521
32	The number of … bilingual programs generally in primary schools [should] be doubled every 3 years for the next decade.	-4	-1.162	-1	-0.381
33	Choices about which languages to offer should be strongly influenced by the wishes of parents and students.	-3	-1.059	0	-0.133
34	What is the point in studying another language when English is now the international language?	-5	-2.233	-5	-1.591
35	Strong parental and community engagement is one of the most important factors in a student's educational success.	4	1.418	3	1.238
36	High levels of bilingualism lead to better cognitive skills, that is, thinking and learning skills, such as problem solving.	4	1.448	-1	-0.43
37	Languages should have equal status with other Key Learning Areas (KLA).	1	0.374	2	0.486
38	Knowledge of the Italian language … also provides access to a rich culture known throughout the world for its contribution to art, architecture, music, ballet, literature, film, fashion and of course, food!	0	0.009	-2	-0.651
39	Languages are central to learning.	1	0.289	0	-0.027

40	Italian is a relatively easy language to learn because of its similarity to English.	-3	-0.845	0	-0.012
41	Languages [should be] valued as an integral part of the mainstream curriculum.	4	1.209	2	0.869
42	Learning languages develops children's overall literacy, strengthening literacy-related capabilities that are transferable across learning areas.	5	2.008	2	0.453
43	Students will learn most effectively through … lessons conducted entirely in the target language.	-1	-0.248	5	2.167
44	Schools [should] plan a languages program that is resourced to an appropriate level, comparable with other learning areas in the school.	2	0.792	3	1.23
45	It would be valuable if mainstream schools aimed to offer at least one European and one Asian language in their curriculum.	-1	-0.223	-4	-1.488
46	All schools [should] provide languages from Prep–Year 10.	1	0.569	-3	-1.291
47	A shortage of qualified languages teachers is a major obstacle to providing languages learning to all students.	1	0.319	4	2.031
48	Studying Italian also provides the background for further studies of other Romance languages, such as French [and] Spanish.	0	-0.127	-3	-0.839

Conclusion

Thoughts on the contribution of Q methodology to language research and looking forward

Nicola Fraschini
Adrian Lundberg
Renata Aliani

Contribution of the volume to Q methodology and language research

This volume explored the potential that Q methodology has for languages studies through its application to three main research areas.

As mentioned in the introduction, Q methodology is grounded in Stephenson's academic background in physics and psychology, and therefore the first part of this volume explored how Q methodology can be used to observe, from a variety of angles, individual's differences in the field of language learning, language teaching, and language acquisition. Part one (chapters 1, 2, 3, and 4) demonstrated that Q methodology is an invaluable tool to research in the field of the psychology of language learning and teaching, being able to offer a fresh perspective on issues such as, but not limited to, teachers' identity, learners' motivation, multilingual families' emotions, and students' self-regulated learning.

Part two (chapters 5, 6, 7, and 8) grouped together works on the topic of teachers' beliefs. Individual beliefs are a personal dimension well suited to be investigated with Q methodology, as already demonstrated by previous research (Lundberg, 2019a). The chapters included in this section show how Q methodology can contribute to reach a holistic understanding of teacher beliefs on topics highly relevant to present-day global educational environments, such as bilingual teaching, plurilingual programs, and teaching in multicultural and multilingual settings.

The third part (chapters 9, 10, and 11) explored an application of Q methodology that has perhaps been less used in language studies so far, with the exception of some ground-breaking work of researchers associated with the Melbourne-based Q Methodology Research Group[33] (Aliani, 2020; Lo Bianco, 2015; Lo Bianco & Aliani, 2013; Lundberg, 2019b; Slaughter et al., 2019), namely using Q methodology to understand and provide guidance for the resolution of issues in language policies and educational planning. Following Thumvichit's

[33] www.qdownunder.org

contribution (chapter 9) on how Q methodology can be used to conduct the evaluation of language programs, the other chapters we included in this last section are still clearly grounded in a psychological approach to the understanding of the research participants; nevertheless, their most relevant practical application is to evaluate an educational program with the goal of implementing changes that are inclusive of all the different perspectives existing amongst the stakeholders.

We hope this edited collection will contribute both to a better understanding and a wider reception of Q methodology, and to more applications of this approach to the study of language, language learning, and language policies. We are also aware that edited collections of Q methodology research available in the English language are particularly scant, and therefore we hope that this volume will increase the visibility of the methodology also outside of the field of language studies. In the field of language studies future book-length publications will have to discuss in depth how Q methodology can be connected to a range of theories such as for example complex and dynamic systems, plurilingual identities, or inclusive educational policies.

Together with increased visibility, a further aim of this volume is to provide a better understanding of what Q methodology can and, perhaps most importantly, cannot do. All contributions to this chapter clearly show that Q is not used as a quantitative technique to test hypotheses and draw conclusions grounded on a 'majority' of the results. On the contrary, all chapters show that when a researcher is interested in understanding the differences and the commonalities among the variety of perspectives existing regarding a research topic, all grounded in the individual subjectivity and influenced by participants' own different surrounding environment, then Q methodology becomes a rich and flexible approach for researchers.

Implications for practice

We hope the chapters included in this collection can inspire researchers interested in addressing complex and dynamic issues at the cross-road of language, behaviour, and subjectivity. At the same time, we are confident this volume demonstrates that Q methodology can be applied to a wide range of topics in language research.

From a research design perspective, most of the Q methodology publications of recent years in the field of education feature one single Q sample administered to a group of participants at one point in time (Lundberg et al., 2020). It is possible to see that with a careful analysis, this design can provide several insights regarding within and across factor dynamics,

as shown in chapter 4 by Nicola Fraschini and Adrian Lundberg. Nevertheless, other chapters included in this collection have shown how Q methodology can be used, if required, to unveil more nuanced complex and dynamic aspects related to participants' subjectivity. Chapter 3 by Akiko Fukuda and chapter 5 by Nicola Morea show two different approaches that can be used to track dynamic changes across the same group of participants. While Fukuda adopts a qualitative stance and Morea a more quantitative one, both effectively show how Q methodology is a powerful tool to understand complex and dynamic variations in participants' behaviour. Chapter 2 by Marinella Caruso and Nicola Fraschini used a second-order factor analysis to conduct a comparison across two groups of learners who sorted the same Q sample, showing how this technique can be used to better understand nuanced behavioural differences across two groups of learners in the same educational environment. Hyunjin Park, in chapter 10, asked her participants to sort out the same Q sample from two different perspectives, showing how Q methodology can be used to investigate multifaceted and complex identities. In other words, the contributions to this volume are an invitation to apply Q methodology to research questions requiring a nuanced and subtle understanding of the dynamic changes at the intersection of environment, behaviour, and people's subjectivity, and invite researchers to avoid being limited to one specific application of Q methodology.

Applications of Q methodology in the language research field can potentially cover many other topics beyond those included in this volume or in the summary presented in the introduction. For example, thanks to its power to include a range of stakeholders' voices without biases, Q methodology can be used to address issues of social justice in multilingual settings, or perspectives on language revitalisation within a given community of speakers. Thanks to its ability to capture different opinions, Q methodology can be put to use to untangle complex views on new issues in language education, such as for example regarding the application of generative artificial intelligence-based tools and other new technologies to language teaching. Furthermore, in a research arena where local and international collaborations are gaining more importance every day, Q methodology can be used, among collaborators, to set the agenda of a research groups and as a tool to understand what researchers are expecting from the collaboration.

As previously mentioned in the introduction, Stephenson proposed that instead of measuring people using a scale, items of a scale can be measured by people. In other words, Q methodology represents a clear endeavour to put the research participants, and their own view of the world, at the centre of the research effort. We invite researchers to use Q methodology to capture and value different perspectives to implement educational changes that take into

account, in an objective way, all the subjective viewpoints not just of the majority, but of *all* stakeholders.

Concluding reflections

As mentioned in the introduction, this volume is published in a vibrant time for Q methodology. Most certainly due to a combination of different reasons, there were many more recent Q methodological publications in our field than previously. This expansion of Q methodology applications has been possible thanks to the availability of free softwares to conduct Q method analysis. Nevertheless, if in many pre-COVID-19 pandemic research Q sorts were mainly collected face-to-face, the events of the recent years have highlighted the importance of being able to collect Q sorts online. We believe that in case of the availability of free software to collect Q data, the use of Q methodology might experience another boost in the future.

The idea for this edited volume emerged from regular discussions that we had within the Melbourne-based Q Methodology Research Group. To cover several geographical areas, authors from different backgrounds also not participating in the Q Methodology Research Group were invited to contribute to the volume. This has resulted in Q methodological studies from different countries from Europe to the Asia-Pacific. Alongside the findings in these contributions, an interesting consideration arising from this volume are the different ways and traditions to using Q methodology. Despite being *one* methodological approach with a 90-year-old history, researchers from various contexts have adapted it to their needs. As editors, we feel like there is much beauty in this diversity, but would also like to remind readers eager to adopt Q methodology to stay true to the very core of Q methodology that is well-described in seminal Q publications by William Stephenson and other leading Q methodologists.

Finally, by conducting a workshop and providing several rounds of editorial reviews, we can acknowledge that the creation of this volume has been a learning process for all of us, as editors and authors worked together as a community of practice. It also reminded us of the importance of mentorship in the Q community, which we have described in a previous publication (Lundberg et al., 2023). Only if more experienced researchers are willing to share their experiences, will the next generation of Q researchers gain a deeper understanding of this approach.

References

Aliani, R. (2020). *Sì, tanti ma non bilingui: Using Q methodology to examine Italian language teaching in primary schools.* (Doctoral dissertation, The University of Melbourne). http://hdl.handle.net/11343/258782

Lo Bianco, J. (2015). Exploring Language Problems through Q-Sorting. In F. M. Hult & D. Cassels Johnson (eds.), *Research Methods in Language Policy and Planning: A Practical Guide*, First Edition (pp. 69–80). John Wiley & Sons.

Lo Bianco, J., & Aliani, R. (2013). *Language planning and student experiences: Intention, rhetoric and implementation*. Multilingual Matters.

Lundberg, A. (2019a). Teachers' beliefs about multilingualism: Findings from Q method research. *Current Issues in Language Planning*, *20*(3), 266–283. https://doi.org/10.1080/14664208.2018.1495373

Lundberg, A. (2019b). Teachers' viewpoints about an educational reform concerning multilingualism in German-speaking Switzerland. *Learning and Instruction.* 101244, https://doi.org/10.1016/j.learninstruc.2019.101244

Lundberg, A., de Leeuw, R., & Aliani, R. (2020). Using Q methodology: sorting out subjectivity in educational research. *Educational Research Review*, 31, https://doi.org/10.1016/j.edurev.2020.10036

Lundberg, A., Fraschini, N., & Aliani, R. (2023). What is subjectivity? Scholarly perspectives on the elephant in the room. *Quality & Quantity*, *57*, 4509–4529, https://doi.org/10.1007/s11135-022-01565-9

Slaughter, Y., Lo Bianco, J., Aliani, R., Cross, R., & Hajek, J. (2019). Language programming in rural and regional Victoria: Making space for local viewpoints in policy development. *Australian Review of Applied Linguistics, 42*(3), 274–300. doi:10.1075/aral.18030.sla