

Learning and Teaching Mandarin in Scotland

Hao Zhang, Yajun Liu, Maggie Mroczkowski, Katarzyna Przybycien, Antonella Sorace
Bilingualism Matters, The University of Edinburgh

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Executive Summary

Contexts and background: significance of multilingualism and the 1+2 Approach emphasising the role of learning Mandarin in a globalised context.

Objectives and Methodology: The research aims to identify effective Mandarin teaching strategies and methodologies, including a multi-faceted, empirical research approach involving interviewing pupils and teachers and conducting questionnaires for both.

Key Findings:

Innovative Aspects: The study notes the benefits of learning Mandarin for dyslexic learners and discusses the development of a Mandarin-specific learning framework.

Challenges in Teaching Mandarin: Discusses challenges in pronunciation nuances, cultural integration, and managing mixed abilities in classrooms. Teachers emphasise individualised attention and differentiation as key challenges.

Logistical Concerns: Points out issues like timetabling and resource availability and addresses the perception of Mandarin as a difficult subject.

Perceptions of Mandarin: Varies from stereotypes to recognition of its potential for future opportunities. The role of teachers in reshaping these perceptions is crucial, emphasising the language's relevance and appeal.

Chapter 1 Background and Objectives

Context and Significance

In a world where global interconnectedness is increasingly pivotal, the mastery of foreign languages stands out as a crucial educational goal. The significance of multilingualism, particularly in the context of Scotland's evolving linguistic landscape, cannot be underestimated. Reports from various authoritative bodies (SRI, 2015; British Academy, the Arts Humanities Research Council, the Association of School College Leaders, the British Council, & Universities UK, 2020) have consistently underscored a gap in language strategy and understanding within the UK's educational system, particularly post-Brexit, highlighting a decline in multilingualism and language learning (Copland & McPake, 2022). In response to this emerging need, Scotland introduced the 1+2 Approach Language Strategy in 2012 (Scottish Government, 2012), aiming to ensure every child learns two additional languages besides their primary language, usually English. This policy, while not explicitly specifying the languages, subtly emphasises the importance of globally significant languages, such as Mandarin, aligning with Scotland's vision of preparing its youth for a global future.

Against the backdrop of these developments, the "Learning and Teaching Mandarin in Scotland" project, a collaboration between Scotland's National Centre for Languages (SCILT), Scotland China Education Network (SCEN), and Bilingualism Matters (BM), was initiated. This initiative aligns with the observed growth in Mandarin language learning among Scottish students, as evidenced by the Scottish Qualifications Authority's 2023 language course reports. These reports revealed a significant increase in Mandarin exam entries at various levels, including a rise from 53 to 282 entries in National 5 Mandarin from 2014 to 2023, an increase from 100 to 233 at the Higher level in the same period, and a jump from 26 to 91 in Advanced Higher Mandarin entries. This data clearly demonstrates the growing interest and commitment to Mandarin language learning in Scotland.

Primary Objective

The main objective of this study is to explore and identify successful strategies, methodologies, and practices in teaching Mandarin. This includes sharing expertise and offering solutions to the challenges faced in the process. The aim is to enrich and sustain the experiences of young Scots learning Mandarin, thereby promoting its widespread teaching and accessibility. This research aims to serve a broad spectrum of stakeholders, from educators to policymakers, ultimately benefitting the learner communities and their families.

Research Approach

Our study utilised a multifaceted research approach, including focus groups with pupils, interviews with teachers, and a comprehensive online questionnaire survey. The objective is to provide a detailed overview of the current state of Mandarin teaching in Scotland. To provide a holistic view of Mandarin teaching with geographical coverage, our research accessed nine schools in eight local authorities. The schools included are Meldrum Academy in Aberdeenshire; Robert Gordon's College in the City of Aberdeen; Grove Academy in Dundee; Boroughmuir High in the City of Edinburgh; King's Park Primary in the City of Glasgow; St Ninian's High in East Dunbartonshire; Lasswade High in Midlothian; and both Stirling High and Braehead Primary in Stirling.

Through this research survey, we hope to shed light on the status quo of Mandarin teaching in Scottish schools. We are confident that this report will serve as a comprehensive guide and resource for anyone invested in the future of Mandarin teaching in Scotland.

Chapter 2 Provision of Mandarin in Scotland

In recent years, the world has witnessed China's ascendancy both economically and culturally, with Mandarin becoming one of the most spoken languages globally. Recognising its importance, many countries have made strides to incorporate Mandarin instruction into their educational systems. Scotland, with its rich history of education, has joined this global trend.

Integrating Foreign Languages into Scottish Education

In Scottish mainstream schools, the journey of learning foreign languages such as Mandarin is an integrated experience. Beginning in primary one, children are introduced to their first foreign language, learning through curriculum-designed content led by the classroom teachers. It should be noted that in Scotland, there are no prescribed textbooks in the educational curriculum.

As they progress, the complexity of language education increases, with a focus on not only linguistic skills but also cultural understanding. This approach aims to build a foundation for linguistic proficiency and cultural awareness from a young age. The Scottish Government, through its "1+2 Approach" language education policy (Scottish Government, 2012), emphasises the importance of learning additional languages. Launched in 2012, the policy sets a goal for every child to start learning their first additional language in primary one and a second by primary five, with this education continuing at least until the end of S3. Under this initiative, Mandarin has emerged as a key language, symbolising its potential in the future global economy, and is taught alongside European languages like Spanish and French. This inclusion of Mandarin highlights the government's recognition of its strategic importance in the global landscape, preparing Scottish children to become global citizens in an increasingly interconnected world."

Scotland's Embrace of Mandarin

The Scottish Government, through its "1+2 Approach" language education policy (Scottish Government, 2012), has highlighted the significance of learning additional

languages. The policy, which was launched in 2012, aims for every child to begin learning their first additional language in primary one and a second by primary five, continuing until at least the end of S3. Under this initiative, Mandarin has become one of the key languages (of future economy), alongside European counterparts such as Spanish and French. This underscores the government's recognition of the strategic importance of Mandarin in the global landscape.

Main Organisations Involved in Teaching Mandarin in Scotland

Scotland's National Centre for Languages (SCILT)

SCILT is Scotland's National Centre for Languages based at the University of Strathclyde. Its main objective is to promote language learning and teaching across Scotland. SCILT also includes the Confucius Institute for Scotland's Schools (CISS), established in 2012 in partnership with the Tianjin Municipal Education Commission from China.

SCILT advocates for the benefits of language learning for young people and the broader Scottish community, and it also serves as a teacher continuing professional development (CPD) base for all language teachers. Particularly, SCILT/CISS offers initial training, continuing mentoring, and support for Chinese Exchange Teachers, with 18 Chinese Exchange Teachers in Scotland this year (2023-2024). SCILT functions as a hub for teachers (CPD) in all language disciplines. Notably, there are currently 46 Confucius Classrooms under SCILT, serving 21 local authorities, including the centrally funded state school, Jordanhill School.

Confucius Institute

Confucius Institutes are non-profit public institutions affiliated with the Ministry of Education of the People's Republic of China. Their main goal is to promote Chinese language and culture, support local Chinese teachings, and facilitate educational exchanges between countries and China.

Scotland is home to five Confucius Institutes, each partnering with a Scottish university (the University of Edinburgh, the University of Glasgow, Heriot-Watt University, the University of Aberdeen and the University of Strathclyde). These institutes have

become focal points for Chinese cultural and educational activities. In addition, there are 46 Confucius Classrooms in Scotland. Confucius Classrooms are extensions of the Confucius Institute, designed to cater specifically to school-age students. They are typically set up in primary and secondary schools or in community hubs, and they function as centres of excellence in Mandarin language learning.

Local Authorities

Local councils in Scotland have a direct role in education provision. Some have been proactive in promoting Mandarin education, recognising the global significance of China and the benefits of Mandarin proficiency for their communities. While the 1+2 Language Policy gives schools flexibility in language choices, some local authorities actively encourage or support schools to offer Mandarin. In some cases, local authorities might directly fund Mandarin teaching initiatives, provide resources, or sponsor events promoting Chinese culture.

GTCS

In addition to the aforementioned organisations, the journey to becoming a Mandarin teacher in Scotland involves a structured educational and professional pathway, which involves the General Teaching Council for Scotland (GTCS).

Postgraduate Diploma in Education (PGDE): The journey begins with a PGDE in Secondary Education, specialising in Mandarin, offered by universities. This course blends academic learning with practical teaching experiences.

Probationary Year: Following the PGDE, graduates enter a probationary year under the Teacher Induction Scheme. This phase provides hands-on teaching experience in Scottish schools under guided support and assessment.

Registration with GTCS: Successful completion of the probationary year leads to eligibility for full registration with the General Teaching Council for Scotland (GTCS). This step is essential for anyone aiming to teach in Scottish mainstream schools.

Employment by Local Councils: With GTCS registration, teachers can seek positions in mainstream schools, where local councils typically manage and advertise teaching vacancies.

Reflecting on Progress and Looking Forward

The Scottish Qualifications Authority's 2023 language course reports reveal an increasing trend in the number of students taking Mandarin exams at various levels. The report details that the entries for the National 5 Mandarin exams —including Simplified, Traditional, and Cantonese—rose to 282, up from 257 in the previous year. The upward trajectory is even more evident at the Higher level, with entries reaching 233 from 220 in 2021. The Advanced Higher level also saw an increase, with the number of entries reaching 91, up from 76 in 2022. These numbers not only chart the progress but also capture the escalating enthusiasm among Scottish students to embrace Mandarin.

Education Scotland's report corroborates this growth trend. It highlights a 428.30% increase in National 5 Mandarin entries from 2014 to 2023, a 135.0% increase at the Higher level, and a 226.9% rise in Advanced Higher Mandarin during the same period. As we celebrate these achievements, we also look ahead with anticipation. We welcome more Mandarin learners and call upon innovative educators, dedicated stakeholders, and visionary policymakers to join forces. This very trend is precisely what sparked our project and drove us to compile this report.

Chapter 3 Methodology

Interviews

In-person audio-recorded interviews were conducted with teachers and learners of Mandarin from two primary and seven secondary schools across Scotland. All interviews were carried out in a semi-structured format, with prepared questions serving as the basis for the interviews. Other points mentioned by participants that were outside the immediate scope of the prepared questions were picked up by the researchers in the course of the interviews.

Teacher interviews

Nine interviews with 12 teachers were undertaken, with each interview lasting approximately 30 minutes on average. The primary objective of those interviews was to understand the most common challenges in teaching Mandarin, teachers' perceptions of Mandarin within the community, opportunities for interdisciplinary learning incorporating Mandarin, and key elements contributing to a successful Mandarin lesson.

- 11 from public school
 - 5 from primary schools
 - 6 from Secondary schools
- 1 from an Independent secondary school

Learner interviews

A total of 24 focus group interviews, including 50 primary school pupils and 82 secondary school pupils, were undertaken. Each focus group consisted of 5-6 pupils on average, lasting approximately 20 minutes on average. The primary object of those interviews was to understand the pupils' perceptions of learning Mandarin, such as the perceived differences and similarities between Mandarin and other languages, the

usefulness of Mandarin, enjoyable aspects of learning Mandarin and areas that need improvement.

- 50 primary school pupils across P3 (3), P5 (19), P6 (16), and P7 (12)
- 84 secondary school pupils
 - 45 at the BGE phase: S2 (30) and S3 (15)
 - 39 at the Senior phase: S4 (28), S5 (4), S6 (7)

Questionnaires

In addition to the interviews, one teacher questionnaire and two learner questionnaires were designed using Google Forms to enhance the insights gathered from the interviews. As such, questionnaire results will be referenced as needed to complement the findings from the interviews. Participants were kindly asked to complete the one aligned with their role at their convenience during their spare time, separately from the interviews. The two learner questionnaires were also made available to learners who did not participate in focus group interviews.

- Teachers (5)
 - 2 from the same primary school
 - 3 from three different secondary schools
- Learners (146)
 - 90 from primary schools across P2 (2), P4 (2), P5 (29), P6 (12), and P7 (45)
 - 56 from secondary schools
 - 28 at the BGE phase: S2 (16) and S3 (12)
 - 28 at the senior phase: S4 (14), S5 (3), and S6 (11)

Chapter 4 Teachers' Perceptions

In this chapter, we investigate the interviews with Mandarin teachers to decipher their views on the current state of Mandarin teaching within their respective environments. The quotations showcased represent the most typical and representative responses, offering us an authentic glimpse into their diverse experiences, successful strategies, and the challenges they navigate in their individual educational settings. These voices collectively portray the current landscape of Mandarin language education.

To provide a cohesive structure to the chapter, the thematic analysis of interviews with Mandarin teachers is divided into four main themes: Challenges in Teaching Mandarin, Perceptions of Mandarin, Interdisciplinary Learning Opportunities with Mandarin, and the elements of a Successful Mandarin Lesson, with a supplementary section on Additional Findings that emerged from the interviews.

Challenges in Teaching Mandarin Teaching

Teaching Mandarin is an intricate endeavour that involves navigating through a host of challenges, including the nuances of pronunciation and the complexities of cultural integration. Through interviews with teachers from various schools, insights emerge into the unique strategies employed and the struggles faced.

At School 1 (Secondary), the teachers tackle the issue of mixed abilities within the classroom, acknowledging the need for individualised attention: "I've often got mixed-level pupils...so they're in the different levels." The teacher at School 2 (Primary) also emphasises differentiation as a key challenge.

Logistical concerns such as timetabling and resource availability are mentioned by the teacher School 3 (Primary): "Teaching materials... here we need to find materials." Meanwhile, School 4 (Secondary) teacher laments the perception of Mandarin as a difficult subject: "perception of Mandarin being hard on all sites and all time." At School

5 (Secondary), the teacher strives to establish positive relationships in a diverse learning environment.

Perceptions of Mandarin

Perceptions of Mandarin among students and the wider community range from misguided stereotypes to an appreciation of its potential for future opportunities. Teachers are at the forefront of reshaping these perceptions, highlighting the language's relevance and appeal.

The teacher at School 6 (Secondary) confronts negative stereotypes, indicating that some students find Mandarin "very hard and a little bit nerdy." This sentiment is echoed at School 5 (Secondary), where the impact of social media is noted to be "90% negative." Conversely, at School 4 (Secondary) and School 7 (Secondary), teachers observe a more positive reception due to the language's novelty and perceived value: "Some parents also express it's very important to learn Mandarin in terms of business and their future." School 2 (Primary) Mandarin teacher remarks on the positive engagement from students, particularly those who may struggle elsewhere: "Pupils who enjoy Mandarin the most are pupils who maybe struggle in other areas of the curriculum." Similarly, the teacher at School 3 (Primary) sees an absence of negativity and even a preference for Mandarin over traditional European languages.

Interdisciplinary Learning Opportunities with Mandarin

Interdisciplinary learning opportunities with Mandarin reveal the language's versatility and its capacity to enrich a broad spectrum of educational experiences. Teachers discuss the integration of Mandarin with other subjects, enhancing both language skills and learner's overall learning experiences.

The teacher at School 4 (Secondary) finds that "you can link Mandarin with almost anything," highlighting the potential for digital learning tools. School 7 (Secondary) teacher mentions the synergy between learning Mandarin and other subjects, like

math and culinary arts, which engage all students. However, the teacher at School 6 (Secondary) points out the constraints posed by students' schedules, which can impede interdisciplinary learning opportunities. Despite these challenges, the educators at School 5 (Secondary) and School 1 (Secondary) successfully implement collaborative projects, like a Chinese New Year poster competition, demonstrating the dynamic but versatile nature of Mandarin teaching.

Elements of a Successful Mandarin Lesson

What constitutes a successful Mandarin lesson varies among our interviewed teachers, yet there are converging points that highlight effective teaching practices.

The teachers at School 2 (Primary) and 4 (Secondary) point out the importance of engaging students through innovative platforms and cross-curricular projects. School 7 (Secondary) teacher emphasises the importance of cultural immersion and active learning: "they know what to do, they know what's better, and they're willing to try." At School 5 (Secondary), the teacher praises technology for providing ample resources and maintaining a structured class routine. The teacher at School 6 (Secondary) calls for more Continuing Professional Development opportunities to mirror those available for European language counterparts. Lastly, the Mandarin teacher at School 1 (Secondary) highlights the crucial role of support systems, including school and parental encouragement, in fostering student motivation.

Additional findings

Along with our talks with involved Mandarin teachers, certain insights emerge as 'hidden gems', offering new perspectives and innovative approaches that could significantly enhance the teaching and learning of this complex language. These gems include the creation of a Mandarin-specific learning framework, the unique advantages Mandarin presents to dyslexic learners, and the diverse dynamics between learners and Chinese Exchange teachers.

Mandarin Learning Framework

The development of a Mandarin-specific learning framework represents a significant leap forward in the quest for a tailored approach to teaching Mandarin. A Mandarin teacher from School 2 (Primary) has pioneered such a framework, recognising that "Benchmarks are not really designed for Mandarin. They're designed for European languages." This bespoke framework, which fits more closely with the linguistic and cultural characteristics of Mandarin, stands to standardise the learning experience in primary schools. With the approval and promotion from authorities like SCILT and CISS, this framework could be instrumental in providing a consistent, high-quality Mandarin education that acknowledges and respects the unique nature of the language, setting a new benchmark for excellence in language teaching.

Dyslexic Learners and Mandarin

An intriguing aspect of Mandarin education is its unexpected benefits for dyslexic learners, offering a new avenue for success where other languages pose significant challenges. As one Mandarin teacher from School 7 (Secondary) points out, "there are lots of research [that] find out that the dyslexic in English doesn't necessarily [struggle] in Mandarin cause the character is like symbols or it's just different the system." The unique character-based system of Mandarin could unlock new ways of learning for dyslexic students, bypassing the common challenges they face with traditional alphabetic systems and tapping into different cognitive processes. This fascinating possibility opens the door to exciting new strategies in language teaching at the school level. The implications of this could be profound, not only for dyslexic learners but also for the methodologies of teaching Mandarin, potentially leading to more inclusive educational practices that cater to a wider range of learning needs.

Chinese Exchange Teachers' Continuing Professional Development

The contrast between Chinese Exchange teachers and locally trained Chinese instructors offers an intriguing point of study within Mandarin teaching. Interviews with participants reveal variances in perceived teacher authority and learner-teacher relationships, which in turn reflect the broader cultural divergences between the two

educational systems and their respective classroom environments. Understanding and addressing these differences is key to developing effective training for Chinese Exchange teachers, ensuring that their teaching methods are appropriately localised and culturally contextualised. Training Chinese teachers effectively to navigate these cultural differences and build strong relationships with learners is essential for fostering an environment where language learning goes beyond mere communication, embodying a bridge between diverse cultures and experiences.

The chapter illuminates the complex landscape of Mandarin teaching, where teachers grapple with challenges such as managing mixed-ability classrooms and combating stereotypes while also seizing opportunities for interdisciplinary learning and fostering successful classroom practices. These themes resonate across various educational settings, revealing a common pursuit of excellence in Mandarin teaching. Among this, 'hidden gems' like a Mandarin-specific learning framework, the language's unique accessibility to dyslexic learners, and the cultural adaptation required for Chinese Exchange teachers emerge, offering nuanced insights that promise to refine and enrich the future Mandarin-specific CPD and research directions.

Chapter 5 Findings from pupil focus groups

Pupil focus groups were analysed thematically. The findings from the pupil focus groups fell under four main themes, which were:

1. differences and similarities between Mandarin and other languages
2. general perceptions about Mandarin
3. enjoyable aspects about learning Mandarin
4. areas for improvement

Within the four main themes, several subthemes emerged, namely:

- the difficulty and/or uniqueness of learning Mandarin compared to other languages
- the view that Mandarin would be useful for travel or in future jobs
- the desire to be able to speak Mandarin with Mandarin speakers in Scotland
- appreciation of Chinese culture
- limitations in being able to converse with Mandarin speakers

The findings are presented below in relation to the themes and subthemes.

Perceived differences and similarities between Mandarin and other languages

In general, pupils noted many of the same similarities and differences regardless of their age group. Senior phase pupils tended to go into more detail regarding the challenge of learning Mandarin in comparison to other languages, for example, due to its character letters, whereas BGE pupils characterised this aspect as more of a novelty. It was far easier for all pupils to think of differences than similarities.

The main differences that stood out between Mandarin and other languages, according to pupils, were tone and the use of characters, pinyin and radicals. In addition, senior phase pupils noted pronunciation, affirmations and negations, sentence structure and syntax, as well as the time it takes to express a message, as major differences. Notably, a senior phase pupil stated that there were fewer rules or exceptions to Mandarin than other languages

learned at school (i.e., French, Spanish). For this reason, the pupil noted that Mandarin grammar becomes easier as one progresses while Spanish, for example, becomes more complex. This was not the view of all pupils, however. Another senior phase pupil felt Mandarin was more difficult than other languages learned at school:

'I think Mandarin is the hardest language that we get here compared to Spanish, French and German. And it's really annoying when people try to compare it because we're like, learning how to do characters and pinyin on top of that and we're doing the culture and I feel it's not the same for other people. I think that's why less people pick it because they know it's more of a challenge. I think when we picked it in primary and I think we realised how much of a challenge it was going to be. I don't regret it. I think it's the best language to learn.'

• Senior phase pupil

As noted above, BGE pupils characterised the tones and characters as more of a novelty, as illustrated in the quote below:

'It's nice to have something so different.'

• BGE pupil (S3)

Another popular difference mentioned among senior phase pupils was the fact that Mandarin is not as gendered a language as other languages.

'That was what was really frustrating about Roman languages...with Mandarin, you do have some gendered words, like pronouns, but generally every word can be used for every gender or just in multiple contexts.'

• Senior phase pupil

Senior phase pupils also commented on the breadth of meaning that can be conveyed by just a few characters. While the uniqueness of Mandarin makes it difficult for some pupils to grasp the language (it was noted that the meaning of words can be easier to guess in some other languages given similar language roots), in general, this was perceived positively.

'It's so interesting because it's so different. It's unlike any other language I've ever seen. It's brilliant, really.'

- *Senior phase pupil*

BGE pupils in both primary and early secondary commented on the difference in resources and activities they have experienced in the Mandarin classroom compared to other language classrooms. Primary pupils mentioned learning through character drawing paper and maps instead of PowerPoint presentations. In addition, a secondary BGE pupil reflected on different emphases between French and Mandarin learning:

'You're more involved in Mandarin than in French. I came up not knowing a lot of French and it was more of just writing down and learning it instead of what French culture is like and learning from that as well.'

- *BGE pupil (S3)*

Perceived usefulness of Mandarin

The usefulness of Mandarin for future work opportunities was noted by all pupils, regardless of their age group. Senior phase pupils expanded on this in terms of Mandarin knowledge facilitating stronger international economic ties with China.

In addition to future jobs, other areas where Mandarin was perceived to be useful included:

- travelling to or studying in China
- in a Chinese shop or restaurant
- speaking to international Chinese students or tourists
- speaking with family members
- business/market economy

Additionally, many pupils spoke about the value of using Mandarin in being able to welcome a Chinese person at their school, make a new friend or communicate and understand others better. One BGE pupil in particular felt that Mandarin would allow them to speak to a Mandarin speaker in their context, allowing the pupil to '*comfort them*' and '*make them feel welcome*'. A senior phase pupil recounted enjoying the feeling when their use of the phrase '*xie xie*' enacted a happy reaction from a Mandarin speaker.

There was a small number of pupils who felt that Mandarin would not be useful to them in the future. One reason given by a BGE pupil was advancing technology. Another BGE pupil felt Mandarin was not useful because they were unlikely to find themselves in a place or situation where they would need to use it. A senior phase pupil commented that the geographic distance between the UK and China, compared to the closer proximity of France or Spain, made Mandarin appear less useful.

The majority of pupils, however, felt that Mandarin was a useful language. Senior phase pupils commented on the benefit of knowing both Mandarin and English, given their global number of speakers.

'Having the combination of English and Chinese means almost the entire world. I can talk to everyone.'

• Senior phase pupil

Others also expressed that Mandarin could also open doors to other Asian languages and make other languages easier to learn.

Enjoyable aspects of learning Mandarin

Pupils reported extensively about what they enjoyed about learning Mandarin. The most popular aspect discussed across all age groups was learning about Mandarin culture. Pupils suggested that culture was embedded in the learning of Mandarin more so than other languages they were learning in school.

Despite the challenge of drawing characters, many pupils highly enjoy this aspect of learning Mandarin. They were often referred to as ‘beautiful.’ It was also thought by some to be ‘therapeutic’ or ‘satisfying.’

'I really enjoy writing the characters and making sentences out of them. But they are challenging and that's why I like learning Mandarin.'

• BGE pupil (Primary)

In relation to Chinese culture, there were many specific aspects that pupils reportedly enjoyed learning about, such as:

- zodiac
- history
- evolution of the characters
- festivals (i.e., Lunar New Year, the dragon dance, mooncakes)
- legends/stories
- food
- traditions
- musical instruments
- native plants and animals

In many pupils' opinions, learning about Chinese culture in Mandarin class is distinct from learning about culture in a French or Spanish classroom.

'Compared to other language subjects, there's way more cultural meaning in Mandarin because like, when you're doing French or Spanish, there's not [many] things they do connected to Spanish or French culture. While in Mandarin, we're making mooncakes, so we're celebrating Chinese New Year.'

● Senior phase pupil

Furthermore, pupils voiced that Mandarin was often taught through storytelling, making the learning of the language inextricable from learning of culture and cultural beliefs.

'Everything's linked, like the words, the way it's written, it's like a story behind everything. Whilst you're learning the language you're also learning the culture and how it's come from like, where the language is spoken in China and what's important for it to be used in.'

● BGE pupil (S1/S2)

Pupils also spoke to a sense of community they felt as a result of learning Mandarin, feeling 'more included' and feeling like they had 'more things in common.' A pupil also noted that Mandarin benefited the brain and encouraged complex thinking.

'I feel like if I know Mandarin, I'll think differently.'

- *BGE pupil (S3)*

For learners at a primary school, the learning of Mandarin was connected to a collective, outdoor space, which learners were involved in creating. The space reflects aspects of Chinese architecture and nature. Other examples of cross-disciplinary learning with Mandarin involved learning how physical education in China differs from that in Scotland.

Pupils listed opportunities where they were able to be creative:

- using ink and a brush
- musical performances
- building dragon boats or lanterns
- making menus
- writing biographies
- drawing characters

Additionally, pupils found the use of Chromebooks in some schools a helpful and enjoyable way to write.

Areas for improvement

In terms of aspects pupils did not enjoy about learning Mandarin, or areas of potential improvement, the lack of exposure to native speakers was a salient finding. The difficulty and pressure of exams were also noted by senior phase pupils, though this is likely not entirely unique to Mandarin.

Pupils mentioned that they enjoyed their teachers' first-hand accounts of life in China and fluency in Mandarin, given that most of the Mandarin teachers included in the current study are native speakers. However, the teacher is often the only Mandarin speaker that pupils are exposed to. The lack of resources available from Mandarin-language media was mentioned as a limitation.

'I feel like Chinese media is much harder to come across than French media or some other stuff. There aren't as many movies or songs or anything because it's so far away as well. It's a bit difficult to come across in learning materials sometimes.'

- *Senior phase pupil*

Other limitations included decreasing enrolment numbers into senior phase levels and a lack of speaking opportunities. This was noted across age groups.

'There's no one else really doing it anymore. That's kind of sad because my classmates, we all used to enjoy it. But now they're focusing on their other qualifications. I understand if they have other things they want to focus on for university, it's just sad I'm not really in a class where I can practice with [anyone] anymore.'

• Senior phase pupil

'I would love to do less theory and more practical stuff. I think it would just be a lot nicer if we could do more of the [speaking] sometimes you're a bit stuck doing the textbook stuff.'

• BGE pupil (S1/S2)

For many pupils, ordering food at a Chinese restaurant or takeaway was the ‘closest thing’ they could get to practicing with another Mandarin speaker. In addition, some pupils felt that they needed to be equipped with more conversational Mandarin.

'We need to learn more basic speech. [There is] too much about memorising rather than actually applying. We're quite limited [in] conversation.'

• Senior phase pupil

On a similar note, some senior phase pupils felt they only learned toward what they would encounter in exams. It was noted that the difficulty and pressure of exams in advanced Mandarin levels might turn pupils away from continuing Mandarin. In addition, many secondary pupils felt Spanish or French would be an easier option, given that they had more previous experience with those languages at primary school.

Pacing was also mentioned by many pupils as a discouraging factor, though this may be down to individual preference. Some pupils found lesson content to be repetitive while others expressed that it was very difficult to catch up if returning from an absence.

'I find that we learn a lot of things all at once and then we move on when we start doing it with a lot of different phrases and we don't get enough time to actually learn those words.'

- *BGE pupil (S1/S2)*

Chapter 6 Mandarin Pedagogy

Mandarin, a language with unique characteristics distinct from European languages, poses both challenges and joys for learners and teachers in Scotland. This chapter draws upon insights from interviews with teachers across various schools, shedding light on the pedagogical approaches, challenges, and successes in teaching Mandarin.

Uniqueness of Mandarin language

Mandarin's distinctiveness from English and other European languages is mainly from three aspects. Its tonal nature is a primary feature, where the tone of a word can entirely change its meaning, exemplified by the syllable "ma" which can mean "媽 mā mother" or "馬 mǎ horse" depending on the tone. This characteristic requires learners to develop a trained ear for subtle tonal variations. Additionally, Mandarin's logographic writing system, where each character signifies a word or part of a word, contrasts sharply with the alphabetic systems of European languages. The complexity and diversity of these characters necessitate unique teaching methods, including visual and mnemonic aids for memorisation. Furthermore, the grammatical structure of Mandarin, free from elements like conjugation, gendered nouns, and plural forms, offers a simpler yet different approach to sentence construction. These differences call for distinct pedagogical approaches in teaching Mandarin, focusing on tonal training, character recognition, and a contextual understanding of grammar, aspects that are less emphasised in European language education.

Teaching Approaches and Techniques

Mandarin teaching in Scotland encompasses a range of methods to tackle the language's complexity. Key approaches are as follows.

Interactive Learning: Teachers often use games and interactive activities to make learning engaging. For instance, creating board games to aid Mandarin learning combines language skills with creativity and teamwork.

Interdisciplinary Learning: Linking Mandarin with other subjects, like business or geography, not only enhances language learning but also provides broader educational value.

Differentiation in Teaching: Given the diverse student needs, teachers adapt their methods to cater to different learning styles and abilities.

Challenges in Mandarin Education

Mandarin education faces several primary challenges. Firstly, there is a widespread perception among students and parents that Mandarin is an extremely challenging language, which often creates a mental barrier to learning. This perception can discourage engagement and make the learning process seem more daunting than it is. In addition to this, teachers frequently grapple with a lack of adequate resources that are specifically tailored to the Scottish curriculum. This resource gap forces Mandarin teachers to spend valuable time creating their own materials, which can be both time-consuming and less effective. Furthermore, time constraints in the classroom present a significant hurdle. Limited class time means students don't get consistent exposure to the language, which is crucial for mastering the language. The combination of these factors – the daunting perception of the language's difficulty, resource limitations, and restricted classroom time – collectively impedes the effective teaching and learning of Mandarin.

Joyful Aspects of Learning Mandarin

Despite the challenges associated with learning Mandarin, several aspects make the process particularly joyful and rewarding for students. One of the most captivating elements is cultural engagement. As students learn the language, they also dive into Chinese culture, which fascinates and engages them deeply. Another aspect that brings joy is the learning experience of characters. Students often find the process of learning and writing Mandarin characters to be soothing or enjoyable. This aspect of the language provides a unique and rewarding challenge, offering a tangible sense of achievement as they progress.

Additionally, for many students, learning Mandarin represents a new and intriguing educational experience. It stands out as a fresh subject, distinct from what they have encountered in their previous studies. This novelty adds an element of excitement and

curiosity to their learning journey, making Mandarin not just a language subject at school but an exploration into a different world of communication and expression.

Chapter 7 Spotlights

Primary Spotlight - A Chinese garden: Connecting with culture and the environment

At a primary school in Scotland, P5-P7 pupils shared ways in which they enjoyed getting involved in Mandarin culture and learning, such as through writing mini books about themselves.

‘I also really liked how we got to do the little books about ourselves, what we liked and didn't like and our age and names and things we liked to drink and didn't drink. That was so much fun.’

P5 pupil

What pupils were most eager to share about, however, was the creation of a Chinese garden at their school.

The Chinese garden

Pupils across levels were involved in the creation of a Chinese garden at their school, which contained a pavilion with a pagoda structure. Pupils were involved throughout its development, such as in getting bamboo and other supplies and painting rocks, fences, and water features. They are given free access to this space. The garden also involved a visit to the Edinburgh Botanic Garden, where pupils drew inspiration and allowed them to connect with nature as well as Chinese culture. The following excerpts shed light on pupils’ experiences with the garden:

‘Well it was [the] opening of our Chinese garden. And [...] we all got like, they went like, “1, 2, 3” and we all ran into like these positions and we had to start doing like Taichi, which was really fun and everyone was watching us. Yeah. And there was also a lion dance. And then the dragon was like throwing oranges.’

P5 pupil

‘And I think that was one of my most favourite things about the Garden, the Chinese garden opening. But the Chinese garden is so much fun. There's like a little hub and I'm excited for

next year. Especially because next year, when we're P6s we'll get to be going into the hub more [...] we'll get to be going into the Chinese garden more...'

P5 pupil

'I also liked like, like so for the Chinese garden we like painted rocks with like koi fish on them. And I thought that was fun.'

P6 pupil

'I liked going to [...] the botanic gardens because we got to look for plants for our Chinese garden and we got to draw them and make ideas for the Chinese garden and that was really fun cause we got to spend the entire day there. Amazing.'

P6 pupil

The Chinese Garden is an example of how cultural learning can tie into outdoor learning, and create positive, early experiences of the Mandarin language. Moreover, the Chinese garden could easily be linked to the United Nations Sustainable Development Goals (See Figure X).



Figure X: The UN Sustainable Development Goals (UN, 2023).

Source: United Nations. (2023). *The Sustainable Development Goals Report 2023*.

Retrieved from <https://unstats.un.org/sdgs/report/2023/>.

Secondary Spotlight - A holistic picture

At one secondary school, we were able to triangulate findings across data sets, including pupil questionnaires and interviews and teacher interviews.

Pupil questionnaire and interview findings

Thirty-four pupils from this secondary school completed the questionnaire, including 18 at the BGE phase and 16 at the senior phase. They shared their motivations for choosing to learn Mandarin, pointing out the uniqueness of the language (compared to other languages they spoke or were learning), as well as their interest in Chinese culture. They also recognised the importance of Mandarin as a valuable means of communication with Chinese-speaking populations and as a gateway to more job opportunities.

Interviews with pupils at this school revealed similar findings, as demonstrated by this senior phase pupil:

‘China is such a powerful country, like diverse economy and size and population, like it's really important to be able to communicate with the people. I think if, especially if you're gonna work there and stuff. Yeah. Have things to do with business or whatever, it would really helpful [...]’

Senior phase pupil

In addition to the value of being able to speak to Chinese speakers, several pupils at this school also noted that learning Chinese would help to be able to communicate with more people around the world in general.

‘And there are lots of different it's not just China. There's also different parts of the world that speak Mandarin. And also there are lots of international people who also speak the language. So it's useful to learn.’

BGE pupil

A few pupils felt that Mandarin would not prove to be useful.

‘I don't think it's that useful. I mean it's quite rare that you might go to China or someplace like that and I, I think the language is just, it's just hard to learn. So it, it is like testing your mind, you know how to remember stuff. So I think it's sort of that rather than the actual language itself.’

BGE pupil

Pupils were also asked about their intentions to continue learning Mandarin in the future. Their responses, provided in Table 1, were elaborated via short answers. Pupils who wished to continue learning Mandarin provided reasons aligned with their initial motivations for choosing Mandarin. Those unsure about their decisions were uncertain about their future pursuits and, in extension, if Mandarin would be relevant to their futures. One pupil decided to stop learning Mandarin due to perceived difficulty of the language.

Table 1: Pupils' Intentions to Continue Learning Mandarin

	Yes	Unsure	No	No Response
BGE pupils (18)	4	13	0	1
Senior pupils (16)	8	7	1	0

In the interviews, pupils described several reasons behind their decision, or uncertainty, to continue learning Mandarin. For one BGE pupil at this school, their decision depended on their perceived level of proficiency:

‘I mean it depends how much, if we think we've learned enough, we're good and we're good enough to the point we don't need to learn anymore. If, like for example, if we, if we still don't think we've, we've learned enough and that we're still not really that great of a speaker, then maybe I can, I'd continue. But if, if I was really good at the language, I wouldn't really want to continue.’

BGE pupil

Others stated that their decision depended on opportunities for travel, future jobs or a desire to instead focus on other subject areas. Some pupils expressed that they would continue learning Mandarin to be able to better communicate with their families.

Furthermore, pupils were asked to evaluate their sense of Mandarin learning progress and confidence. Out of 34 pupils, 33 reported that they had made progress in Mandarin learning. Overall, pupils felt confident, with over 50% of them reporting “very confident” or “somewhat confident” in six learning skills, particularly in reading pinyin (Figure 1).

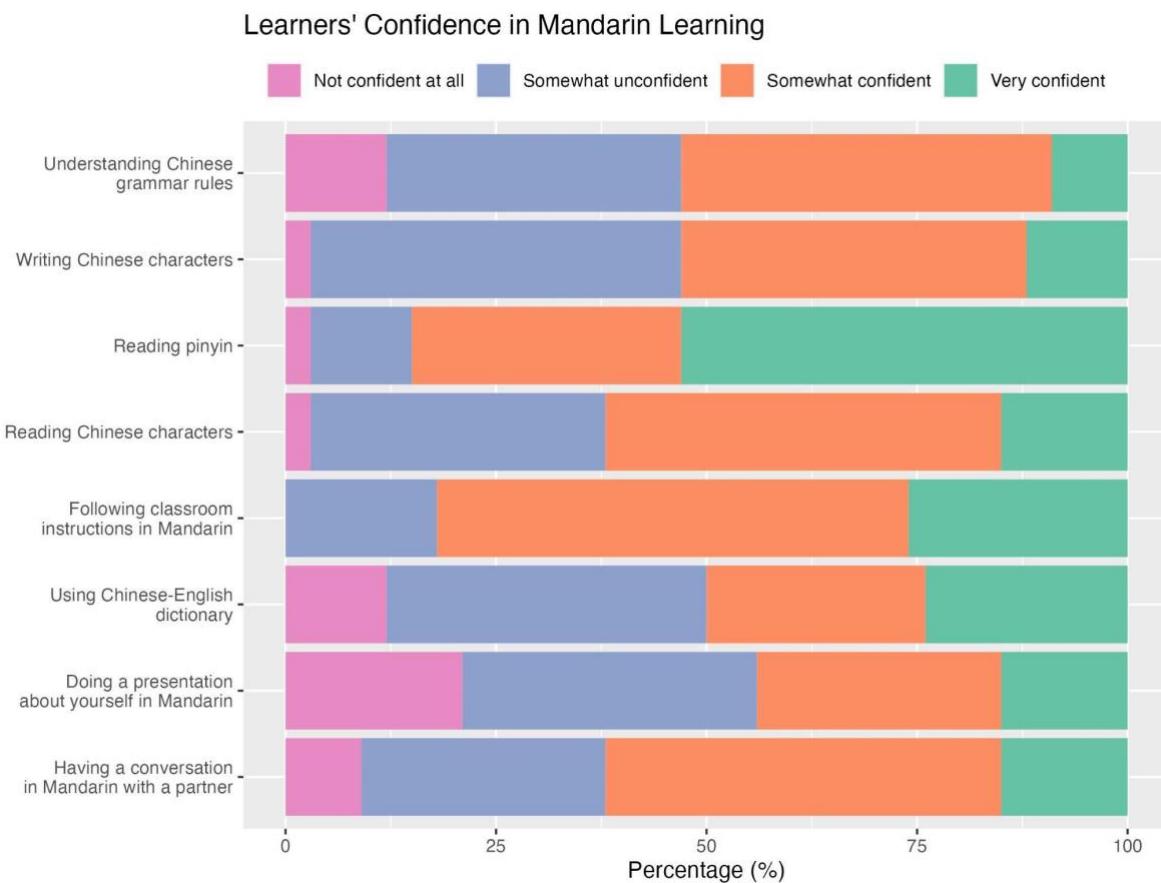


Figure 1: Pupils' evaluation of their confidence in eight Mandarin learning skills.

One reason why pupils may feel less confident was offered by this BGE pupil in the interview:

'Like when I got, I got a tutor and I've only been doing it for a couple weeks, but I know that in that class it's like I feel more sort of confident because I know like it's more okay to like mess up and like to not understand and I can get the help that I need to be able to push past that. Whereas in this class, because there's only one teacher and 30 students, I could be really struggling, but if there's people struggling more than me means they're, they prioritise people because essentially like it's trying to get everyone up to the same level.'

BGE pupil

The Mandarin teacher at this secondary school voices concerns that mirror those commonly experienced by Mandarin teachers: the difficulty of teaching Chinese characters both efficiently and effectively. This challenge is a shared and persistent worry.

"But over the years it's impossible to recycle all the characters... It's frustrating for them. It's frustrating for me."

In an effort to address the challenge, the teacher strategically incorporates online tools such as Quizlet and the Sentence Builders website into their teaching routine. Additionally, there is an increased focus on demonstrating and reviewing characters during class time to enhance learning and retention.

Though many pupils expressed in interviews that learning characters was indeed difficult, pupils also spoke about overcoming the challenge.

'I would just say being able to write the characters. Like, cause when you, when you were first, when you've never seen Chinese before and you first see the characters like how could I ever understand that? Then when you actually learn them and learn a sentence, it's quite, quite impressive.'

Senior phase pupil

The complexity of learning Chinese characters was further summarised by this BGE pupil:

'I enjoyed the like writing and reading of characters. It's like a bit of a challenge but it, you like feel accomplished once you've done it. And it like, it kind of makes you realise that there's like a lot more ways to communicate. Because if you took, if you took away like any other form of the language and just have characters, essentially you're just like looking at pictures but you, you, you like know what they say. And it doesn't have to be like a detailed picture cause it's like a simple like it could be like a five-line drawing but you know what it is.'

BGE pupil

Chapter 8 Challenges and Opportunities/ Conclusion

Summary

This report is a first-of-this-kind survey research engaging nine schools across eight local authorities, and it offers a qualitative, comprehensive insight into Mandarin education, standing as a testament to the commitment and enthusiasm of various stakeholders. Each chapter has unravelled the on-the-ground intricate fabric of Mandarin teaching practices and ongoing discourses, shedding light on diverse perspectives, innovative approaches and emerging opportunities.

Our report first began with an exploration of the current landscape of Mandarin education in Scotland by highlighting the language education policy background and roles of different institutions involved in Mandarin teaching.

The findings from teachers and pupils gathered through a qualitative approach presented a holistic picture of the perceptions, joys, and challenges of Mandarin learning. For instance, teachers navigate multifaceted challenges, from managing mixed-ability classrooms to limited resources, while striving to alter the perception of Mandarin as a daunting language. Their innovative pedagogical approaches, tailored to Mandarin's unique nature, enhance classroom engagement through cultural elements and technology integration. Pupils, on their part, appreciate Mandarin's cultural depth and future utility, though they express a need for more practical language application and exposure to native speakers. From the unique pedagogical approaches necessitated by the distinct nature of the Mandarin language to the cultural richness that it brings to the classroom, each insight has contributed to our understanding of the dynamic and nuanced Mandarin teaching classroom. Moreover, the innovative aspects identified, such as the benefits of Mandarin for dyslexic learners and the development of a Mandarin-specific learning framework, underscore the transformative potential of this educational field within the Scottish school agendas.

As a result of this research, several opportunities and challenges can be identified in the teaching and learning of Mandarin in Scottish schools.

Challenges

- Mandarin presents unique difficulties, such as the use of Chinese characters. Many pupils have little prior knowledge of this alphabet. For some, this requires a new level of perseverance.
- There are limited opportunities for Mandarin learners to engage with native speakers of Mandarin or authentic Mandarin learning media sources and materials. However, Mandarin teachers have virtually brought their own friends and family into the classroom in an effort to overcome this challenge. While listed here as a challenge, this point also presents an opportunity for Mandarin teachers to share practices.
- Though pupils are drawn to the novelty of Mandarin in comparison to other language subjects, Mandarin classrooms still face decreasing enrollment into the senior phase. This makes it difficult for pupils to practise their Mandarin skills with classmates. However, this is not a Mandarin-specific problem and is a challenge that needs to be addressed across language learning in Scotland.

Opportunities

- There are unique opportunities in the Mandarin classroom for engaging pupils, such as through music/musical instruments, legends, history, festivals, food and nature. These also present opportunities for cross-disciplinary learning.
- Pupils are highly enthusiastic about Chinese culture, which could act as a significant motivator in learning Mandarin. The focus groups provided many examples of cultural aspects that pupils find interesting. The teaching of Mandarin could allow for a language learning experience that is perhaps more steeped in culture than previous language learning curricula and time constraints have allowed, meriting further exploration.
- On a final note, this report has also presented many areas for potential research. While this report serves as a snapshot of Mandarin learning in Scotland, future studies could provide more in-depth classroom case studies or undertake a large-scale survey.

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The participation of schools, pupils, and teachers has been the backbone of this research. Their voices, experiences and perspectives have not only enriched our findings but have also illuminated the path for future endeavours in this field. We extend our heartfelt appreciation to each one of them for their invaluable contribution.

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