Chapter 5

Chinese teachers as researchers

Using research as a tool to improve practice

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Introduction

This chapter takes as its point of departure the stance that modern foreign language teachers should consider being involved in research to explore their classrooms. This would enable them to have a better understanding of their students' learning and their own teaching, and it would also contribute to their professional development. Language teachers play a central role in their classrooms since they monitor learning and evaluate their students' day-by-day performance and progress. To this end, it is crucial that teachers develop a range of skills in planning, monitoring, and evaluating their own professional activities and the results of the teacher–student interaction. Research has increasingly become both a useful skill that teachers can include in their professional repertoire and an interesting and meaningful journey on which to embark. By 'research skills' for modern foreign language teachers, we do not mean scholarly theoretical knowledge of the literature or empirical research skills conventionally deployed in traditional academic research. We believe that it is important and necessary for language teachers to have a range of specific research skills for exploring and solving immediate problems in their own classrooms and institutions (Walker, 1985; Nunan, 1993; Mertler, 2014). In this chapter, we advocate doing action research in language classrooms because it allows teaching practitioners to reach a more personal goal when investigating the teaching and learning in their own classrooms (Freeman and Richards, 1993) and it gives teachers a voice in decision-making and control over their environment and professional lives.

Action research presupposes certain skills and knowledge needed for classroom research. In particular, teachers need to be able to conceptualize their practice clearly in a fair way, be aware of issues amenable to action

research, and they need some basic skills in data collection and analysis (Burns, 1999). As suggested by Walker (1985), these skills include 1) the ability to monitor and describe both their own and their pupils' activities and behaviours, 2) the ability to evaluate their practice, performance, and policy in teaching and administration, 3) the ability to provide evidence and analysis of the school's programme for management purposes, and 4) the ability to modify or change their behaviours on the basis of their understanding of classroom settings. These abilities can be developed through action research projects. In this chapter, we will explain in detail how to develop the skills for action research and share with you two case studies of how two teachers of Mandarin Chinese, after some training, have deployed their action research skills in understanding their students and classrooms.

While advocating action research in language classrooms, we admit that language teachers have no obvious incentive to do research. For one thing, teachers usually find that they do not have time to do research as academics do, as they have full teaching schedules and any research which they do is not usually acknowledged or rewarded; for another, it is not particularly easy for teachers to find the resources, support, or facilities needed for research, such as books or articles from the literature, or people who can offer advice about methods for collecting and analysing data. Hence, many teachers have been discouraged from doing research. However, what we propose in this chapter is that action research is a powerful form of teacher development, because the classroom enquiry and self-reflection that it entails are important components of the professional growth of teachers. It provides a sound source for pedagogical planning and action and enables teachers to frame the local decisions of the classroom within broader educational, institutional, and theoretical considerations. It 'reinvigorates classroom teaching, leads to positive change in the classroom, and raises the teachers' awareness of the complexities of their work' (Burns, 2010: 7). Action research is a source of teacher empowerment.

Using action research as a tool to improve classroom practice

The origin of action research can be traced back to the late 19th century (McKernan, 1996). In the early part of the 20th century, John Dewey, one of the progressive educators of that time, challenged the orthodox scientific research methods. His ideas were democratic in nature, as he argued for demystifying the approaches towards educational research derived from the natural sciences and advocated that researchers, practitioners, and those

involved in the educational community should be engaged in educational enquiry collectively in order to confront common educational problems (Burns, 2010). In recent times, the approaches of action research are essentially participatory, in that they are conducted by and with members of the actual community under study (Bailey, 1998) in naturally occurring settings, primarily using methods common to qualitative research (Nunan, 1992; McKernan, 1996; Phillips and Carr, 2014), such as observing and recording events and behaviours. It can be said that 'the findings and insights that are gained through action research are driven primarily by the data collected by the participants within their specific teaching situations, rather than by theories proposed through investigations which are external to the teaching context, but which many attempt to generalize to that context' (Burns, 1999: 24).

Action research is a process of reflective practice, where the teachers are the researchers (Burns, 1999; 2010). The teachers reflect on their teaching by taking a questioning and problematizing stance towards their teaching. They take an area where they feel it could be done better and intervene in a deliberate way in the problematic situation in order to develop new ideas and alternatives and bring about changes and, even better, improvements in practice. Hence, 'the linking of the terms "action" and "research" highlights the essential feature of the method: trying out ideas in practice as a means of improvement and as a means of increasing knowledge about the curriculum, teaching and learning. The result is improvement in what happens in the classroom and school, and better articulation and justification of the educational rationale of what goes on.' (Nunan, 1993: 2). In Nunan's words, action research provides a way of working that links ideas and practice into one whole: ideas-in-actions. (Nunan, 1993: 5). In action research, a teacher becomes an investigator or explorer of his or her personal teaching context, while at the same time being one of the participants in it (Burns, 2010). It should be noted that the improvements that happen due to action research are based on data that an action researcher collects systematically, and that the changes made in the teaching situation arise from solid data rather than from mere assumptions about what the teaching should be like. To summarize, action research can be characterized in the following ways (Burns, 2010; Mills, 2014):

1. It is contextual, small-scale and localized: it identifies and investigates problems within a specific situation.
2. It is evaluative and reflective, as it aims to bring about change and improvement in practice.

3. It is participatory, as it provides for collaborative investigation by teams of colleagues, practitioners and researchers.
4. Changes in practice are based on the collection of information or data that provides the impetus for change.

Action research suffers from a lack of prestige compared with more established forms of language education research, as it is less based on formal experiments. However, it has its unique strengths. First, it addresses issues that are of immediate concern to practitioners. Second, the results can be promoted and disseminated via workshops, staff meetings, or papers for other teachers working in similar situations. Furthermore, teachers improve their teaching by being involved in a genuine research process of data collection, analysis and interpretation, which contrasts with intuitive reflection. In addition, unlike traditional research, which tends to leave the implementation of research to the practitioners, in action research putting findings into practice is an integral part of the research process (Burns, 1999: 25). This process empowers the teacher-researchers by reaffirming their professional judgement and encouraging involvement in decision-making with respect to curriculum design and policy in school and perhaps beyond.

Steps in action research

According to Kemmis and McTaggart (1988; see also Burns 1999; 2010), leading figures in the field, action research occurs through a dynamic and complementary process, which involves four broad phases in a cycle of research: planning, action, observation and reflection. First, in the planning phase, a teaching practitioner identifies a problem or issue and develops a plan of action: he or she should consider specific possible improvements to teaching and learning. Second, the teacher acts to implement the plan. This implementation process is usually carefully planned, involving some deliberate interventions in the teaching situations, and it often takes a period of time. Third, the teacher observes systematically the effects of the critically informed action in the context in which it occurs. This phase involves documenting the context, actions and opinions of those involved. It is a data collection phase where the teacher-researcher collects information about what is happening. And finally, he or she reflects on, evaluates and describes the effects of the action to understand the issue that has been explored. Planning, action, observation and reflection form the first cycle of action research. But the cycle may become a continuing, or iterative, spiral of cycles that recur until the action researcher has achieved a satisfactory outcome. This model of action research is illustrated by the diagram in Figure 5.1, which shows its iterative or recursive nature.
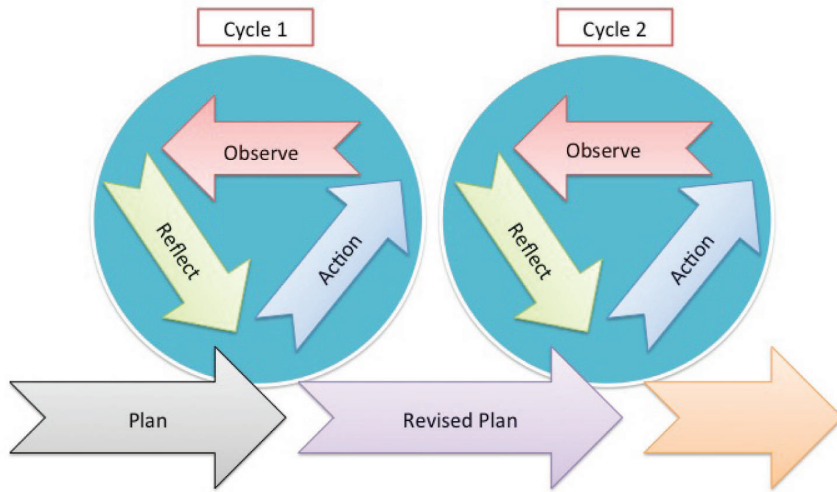
Figure 5.1: Action research cycles (Adapted from Kemmis and McTaggard, 1988: 11–4)

Though Kemmis and McTaggart's model was proposed in the late 1980s, it is probably the best known and is still the most representative model of action research. However, there are critiques of their model and theories. The criticism is mainly centred on their assumption of a fixed sequence of procedures that are self-contained and on the contention that the model overlooks the complexity of the action research process. For example, McNiff (1988, 2014) advocates a more flexible approach that allows action researchers to be creative and spontaneous in conducting their action research projects. That is, the teacher-researchers can have their own theorizing and steps tailored to their own needs or their students' needs regarding teaching and the classroom instead of rigidly following the steps that are illustrated above. In a similar vein, although we advocate Kemmis and McTaggart's model as presenting a clear overall picture of action research, we acknowledge that it involves many interwoven aspects: 'exploring, identifying, planning, collecting information, analysing and reflecting, hypothesizing and speculating, intervening, observing, reporting, writing and presenting' (Burns, 1999: 35). These processes and features are not necessarily clearly delineated and separate points in the research, but all of them play important roles. To illustrate in more concrete terms how to do action research, the next section is dedicated to two case studies of actual classroom situations in schools in England. Mandarin Chinese language teachers identified a problematic area in their teaching and intervened with positive changes.

Both teacher-researchers attended a one-day workshop on how to do action research organized by the UCL Institute of Education Confucius Institute. During the two months that followed, they applied the techniques to which they had been introduced in their classrooms to address their teaching concerns, and as a result they have also contributed to this collection in chapters 6 and 7 respectively. In this chapter, both case studies are presented following the planning, action, observation and reflection cycle. In chapters 6 and 7, each project is analysed in detail by the teachers themselves doing action research in their classrooms, applying the principles.

Case study 1: The intelligibility of Anglophone young beginner learners of Mandarin Chinese in England

Rob, the teacher researcher, found that tone, or the use of pitch differences 'to distinguish the dictionary meaning of words' (Collins and Mees, 2008: 133), is generally considered to be particularly problematic for Anglophone learners and has consequently been the focus of the majority of research into Chinese as a foreign language (CFL) pronunciation studies (Xing, 2006; Ke, 2012). While various reasons have been put forward to explain why Anglophone learners tend to struggle with tones, ranging from interference of English intonation patterns (White, 1981; Chen, 1997) to the inherent unfamiliarity of native English speakers with tones (McGinnis, 1997; Winke, 2007), it is by no means clear how important standard tones are for communication. Hence, set within the context of teaching and learning Chinese at a comprehensive secondary school in the north of England, the aim of this action research project is not to question whether tones are difficult for Anglophone learners, but to make some preliminary investigations into which specific areas of the L2 speech signal mislead L1 Chinese listeners. By working at the syllable level and engaging closely with the construct of intelligibility, it will be argued that there is a danger of placing 'perfect' tones on a pedestal at the expense of equally significant pronunciation priorities for the beginner Anglophone learner of Chinese, such as initials and finals.

Planning: From 'nativeness' to 'intelligibility'

Much of the CFL pronunciation research remains heavily influenced by the 'nativeness' principle, which holds that 'it is both possible and desirable to achieve native-like pronunciation in a foreign language' (Levis, 2005: 370). For example, Shen (1989), Miracle (1989), Chen (1997), Winke (2007), Tao and Guo (2008) and Zhang (2010) all use native speakers to rate the L2 Chinese participants' tonal productions as 'correct' or 'incorrect.' Partly as a

result of such research, three native-speaker Chinese teachers were deployed to rate the tonal productions of students, yet Rob was struck by the high levels of subjectivity involved in judging the acceptability of the tones (Neal, 2014). In this research project, therefore, the decision was taken to move away from a simplistic focus on whether students' tones were 'correct' or 'incorrect' according to L1 Chinese raters, to a wider focus on intelligibility, defined as 'the extent to which the listener can understand the speaker's intended words' (Zielinski, 2008: 70). As well as being able to test whether intended meanings could still be understood despite non-standard tones, this new emphasis on intelligibility would allow the researcher to begin to draw up more robust pronunciation priorities by focusing primarily on those areas of speech that led to breakdowns in communication (Derwing and Munro, 2005: 385).

Action

Originally, role plays were recorded on digital voice recorders in which five students were asked simple questions about their lives in Mandarin Chinese. The role plays featured topics already covered in class (e.g. hobbies, food and drink) and lasted around 90 seconds. At the time of the recordings, all students had been studying Chinese for six months and were either 14 or 15 years old. None of them had had any previous experience of learning a tonal language and they were all L1 English speakers. Working independently and with full access to written transcripts of the students' role plays, three L1 Chinese raters were asked to listen to the audio files and code each character as acceptable or unacceptable in terms of tonal production according to Chao's (1968) system of tone values. Two of the raters were Chinese teachers at the same school as the students, although the other rater had had virtually no previous exposure to L1 English speakers of Chinese. In order to increase the reliability of the study, only tones coded as acceptable by all three raters were used to calculate each student's overall tonal acceptability rating.

For the follow-up, sections of the audio files taken from the learners' role plays were sent via email to five students at a senior high school in Beijing. Given that familiarity with a topic and non-native accents are likely to promote comprehension (Gass and Varonis, 1984), raters were used who would not be overly familiar with the accents of L1 beginner English learners of Chinese or the *Jìn bù* textbook students had been following (Bin *et al.*, 2010). Each rater was asked to listen to the audio file only once and transcribe what they thought they had heard in Chinese characters. Following Derwing and Munro (1997), each transcript was then used to calculate an intelligibility score based on the number of characters the rater

could successfully transcribe. For example, if a rater successfully transcribed 80 characters out of a possible 100, then the student would be awarded an intelligibility rating of 80 per cent. The overall intelligibility rating for each L1 English student, based on an average score of the five Beijing high school raters, was then compared with the students' original tonal accuracy scores from previous research.

Particular attention was paid to the areas where the raters had transcribed a different character from what the speaker had intended to say. Knowledge of the speakers' original intentions was based on familiarity with the students' L2 Chinese accents and 'insider knowledge' of the language covered in class and produced for homework. The source of the breakdown in intelligibility was categorized as either being a result of the tone, or the initial consonant of the syllable or the final part of the syllable deviating from the standard form, or a combination of two or all three of the factors. For example, if the rater transcribed 是 shì (be) when the student had intended to say 十 shí (ten), then the breakdown would be traced directly to tone. However, if the rater transcribed 猫 māo (cat) when the student had attempted to say 妈 mǎ (mother), then both tone and the final would be implicated as contributing to the misunderstanding.

Observational findings

The corpus of speech produced by the five participants totalled 412 characters. It was immediately apparent that all five participants obtained much higher intelligibility ratings than tonal accuracy ratings (see Figure 5.2).
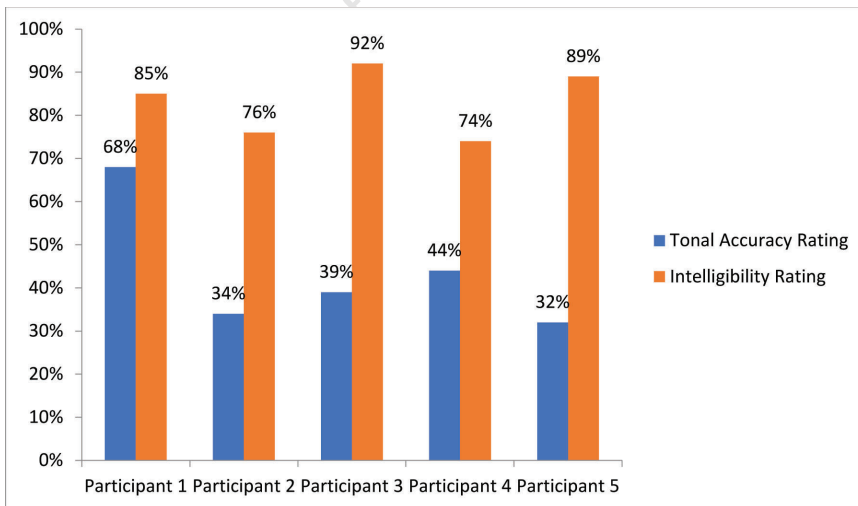

Figure 5.2: Comparing participants' tonal accuracy and intelligibility ratings

This appears to lend support to the claim that L1 Chinese speakers may well be 'able to understand intended meanings regardless of incorrect tones, simply based on the discourse context' (Duff *et al.*, 2013: 49). However, there should be no room for complacency. It is unlikely that participants 2 and 4 for example, with intelligibility rates of 76 and 74 per cent respectively, are making much sense at all and are certainly a very long way from 'a comfortably intelligible pronunciation' (Abercrombie, 1949: 120, as quoted in Derwing and Munro, 2005: 384), which seems to be a reasonable goal of pronunciation instruction.

Given concerns about the limitations of this actions research project, it is difficult to be certain about the specific causes of the intelligibility breakdowns. Nevertheless, it seems reasonable to conclude that the participants' pronunciation problems run far deeper than non-standard tones (see Figure 5.3).

For example, while 15 per cent of all the intelligibility breakdowns can be traced directly to tone, 13 per cent of the breakdowns can be linked directly to finals. Although there are no examples of intelligibility problems being caused solely by initials, 52 per cent of the breakdowns implicate non-standard initials as a contributory factor. Moreover, the most frequent cause of breakdown occurs when the tone, initial and final are all different from the target pronunciation (23 per cent), suggesting that in these cases, the real cause of the problem is inadequate lexical knowledge as much as non-standard pronunciation.
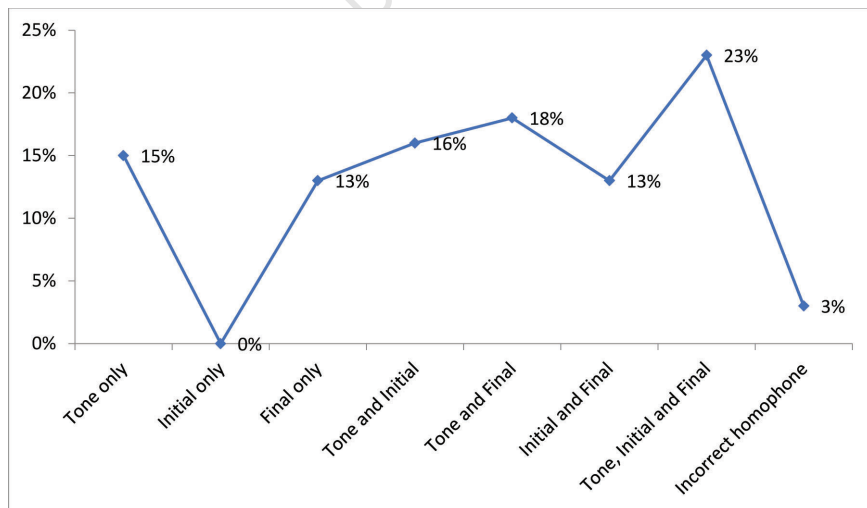

Figure 5.3: Causes of combined breakdowns in intelligibility (n = 62)

Reflection

While much of the previous research into CFL pronunciation has focused mainly on tones, the findings here suggest that more emphasis should be placed on initials and finals in the classroom alongside tones. A good place to start would arguably be with a renewed focus on the Romanized orthography known as Pinyin, which has become the standard transcription of Mandarin Chinese words (Lin, 2007: 7). Rushing to launch into teaching characters, teaching Pinyin properly may have been neglected with negative consequences for the students' intelligibility. However, as it is widely known, a focus on Pinyin can easily lead into an over-reliance on using the Latin alphabet to represent Chinese sounds, which could in turn slow down character learning in the long term. A sensible trade-off would be for more research into establishing precisely which initials and finals are most important for intelligibility rather than spending valuable teaching time on all the sounds of Pinyin. The data sets used in this research project however, have been far too small to begin to answer this question.

A key issue related to teaching pronunciation is the extent to which it can be picked up implicitly or whether explicit instruction is necessary (Derwing and Munro, 2014). Initially assuming that students could simply acquire an acceptable Chinese accent through frequent exposure to Chinese in the classroom is in line with communicative language teaching (CLT), which emphasizes authentic use of language and sees repetition and corrective feedback as disruptive to communication (Derwing and Munro, 2014: 38). However, the evidence from this study suggests that without explicit correction, learners are showing evidence of fossilized speech patterns (ibid.: 38). For example, alongside the two instances of incorrect homophones, raters often had problems transcribing students' Chinese names, with none of them being able to transcribe participant 4 or participant 5's Chinese names successfully. This is despite the fact that all the learners were frequently exposed to accurate pronunciation of their own Chinese names, both from the teacher and other L1 Chinese teachers during lessons. A renewed focus on pronunciation will need to be handled sensitively and without demotivating or scaring some learners by being overly strict in the classroom. However, the alternative approach of ignoring pronunciation issues is potentially even more confidence-sapping for learners in the long run, for if they find that they cannot make the limited Chinese they know intelligible to others, they will surely lose motivation quickly (Zielinski and Yates, 2014: 75). The challenge, therefore, is to teach pronunciation in

ways that are 'systematic, […] non-threatening, engaging, and confidence-building' (75).

Case study 2: An investigation into the most effective strategies for beginner Anglophone learners to read and write Chinese characters

Paul, the teacher researcher, understands that rote learning, storytelling and making reference to radicals are three of the most commonly used strategies recommended by teachers to assist learners in learning to read and write Chinese characters (McGinnis, 1999; Shen, 2005). In Paul's teaching practice, he has constantly wondered what strategies for learning pupils themselves believe to be most effective for supporting them to learn to read and write Chinese characters. Besides investigating this issue, he has also hoped to make his research findings more generalizable in order to fill a current void in research into how Anglophone learners learn Mandarin and what they find most difficult about learning the language. A further goal of the investigation was to gauge ten teachers' opinions of the most effective strategies and assess whether their perceptions match those of the learners. In his study, a sample group of 42 beginner learners of Mandarin Chinese from two UK secondary schools completed two questionnaires prior to and post intervention period (a period in which pupils gained a deeper understanding of the three strategies mentioned above). Results showed rote learning for writing to be the most favoured strategy by both pupils and teachers. Rote learning was also favoured by pupils for reading, whereas teachers preferred the use of radicals.

Planning: What works best for Anglophone learners?

Rote learning is the method Paul used when learning how to read and write Chinese characters and is the method that has been favoured historically by native-speaker Chinese teachers of native-speaking Chinese pupils (McGinnis, 1999). Storytelling involves telling a story about an individual Chinese character in the hope that the story and the character will be recalled later (Shen, 2005). An example may be describing to pupils that the character for 'good' (好) in Chinese consists of the character for 'woman' (女) combined with the character for 'child' (子). By combining the two we gain insights into the Chinese psyche: that the idea of a female (女) with a child (子) is good (好). Understanding and making reference to radicals (the part of the character that can offer a learner clues about the meaning of the character) appears to appeal to pupils because they only need to recall some of the character and not the whole character if they can recall which

radical is in the character (Shen, 2005). For example, the verb 'to eat' (吃) in Chinese contains the radical for mouth (口). If a learner can recall that they eat with their mouth and therefore the character for 'eat' contains the radical for mouth, this may help them to recall and reproduce that character more easily.

There is a severe shortage of evidence relating to the strategies that primary or secondary school learners of Mandarin Chinese use, as the majority of research has been conducted into university students' strategy selection (Shen, 2005; Sung and Wu, 2011). The scarcity of academic literature and increase in curriculum provision of Mandarin Chinese in secondary and primary schools in the UK confirms an important need for further evidence to support teachers in using the most appropriate strategies for learning Mandarin Chinese and to support pupils in adopting the most effective strategies. Although research into the most effective learning strategies used by learners of Roman alphabet-based languages offer useful insights (Krashen, 1981; Oxford, 1990), one cannot draw easy comparisons or firm conclusions from their findings when considering a character-based language (Scrimgeour, 2011). Whether or not language learning strategies are innate, as some evidence has suggested (Chomsky, 1986), and therefore arguably transferable to different types of languages, would be interesting to investigate further. Additionally, it is important to consider how large the impact of motivation is (Crow, 1986) or whether the process of writing is a deeper and therefore more difficult process (Corson, 1995). It may also be the case that learners of different ability levels use different strategies (Everson and Ke, 1997; Chang 2010).

The teachers' and pupils' questionnaires were specifically designed to address the five key objectives of the research project. The questions in the questionnaire were then cross-referenced with these objectives with the aim of ensuring that they would provide data relevant to the objectives. In order to enable comparison between teachers' and pupils' perceptions, the questionnaires had to be very similar. A list of the objectives of the investigation, expressed as questions, can be seen below:

1) Which learning strategies do pupils perceive to be the most effective for learning to read and write Chinese characters?
2) Which learning strategies do teachers perceive to be the most effective to enable their pupils to learn to read and write Chinese characters?
3) Does teaching pupils about the three seemingly most effective learning strategies impact on their perceptions of the most effective learning strategies?

4) Is there a difference between teachers' and pupils' perceptions of the most effective learning strategies?

5) Is there a difference between the perceptions of pupils in a selective school compared to a non-selective school?

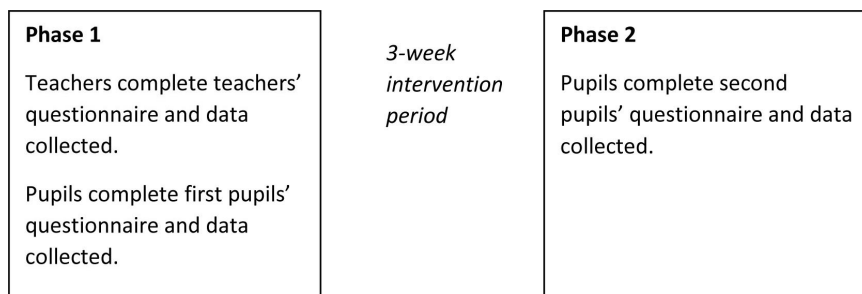A diagram of the data collection cycle can be seen in Figure 5.4:

Phase 1 Teachers complete teachers' questionnaire and data collected. Pupils complete first pupils' questionnaire and data collected.	*3-week intervention period*	**Phase 2** Pupils complete second pupils' questionnaire and data collected.

Figure 5.4: Data collection cycle

Action

Following a Mandarin teachers' action research group meeting at the Institute of Education in London in March 2014, Paul became aware that two colleagues were also interested in investigating pupils' perceptions of the most effective learning strategies for learning to read and write Chinese characters. Having shared his research project objectives with them, the two colleagues were keen to support the investigation by contributing to the collection of data. One colleague therefore carried out some of the data collection within her school in Sheffield. The other colleague supported the collection of some of the data relating to teachers' perceptions by contacting a number of her colleagues whom she knew would be interested in contributing to this research.

The sample groups were selected using specific criteria. It was essential that participants in the pupils group were in their first year of learning Mandarin and studying at a school in the UK. It was also important that participants in the teachers group were working either part- or full-time as Mandarin teachers in UK schools. The 28 pupils from the selective grammar school were Paul's Year 8 Mandarin class, who began learning Mandarin in September 2013. The 14 pupils from the non-selective comprehensive school were the pupils of Paul's colleague's Mandarin class, who began learning Mandarin at the same time. Data was analysed by converting raw data into percentages to give a clearer idea of what proportion of the pupil and teacher cohorts preferred the respective methods of learning to read and

write Chinese characters. It was agreed that Paul would first share findings with his two colleagues and following that, they would have the opportunity to inform their pupils or colleagues of the findings. The research results were later presented at a national Mandarin teacher's conference.

Observational findings

Which learning strategies do Anglophone pupils perceive to be the most effective for learning to read and write Chinese characters?
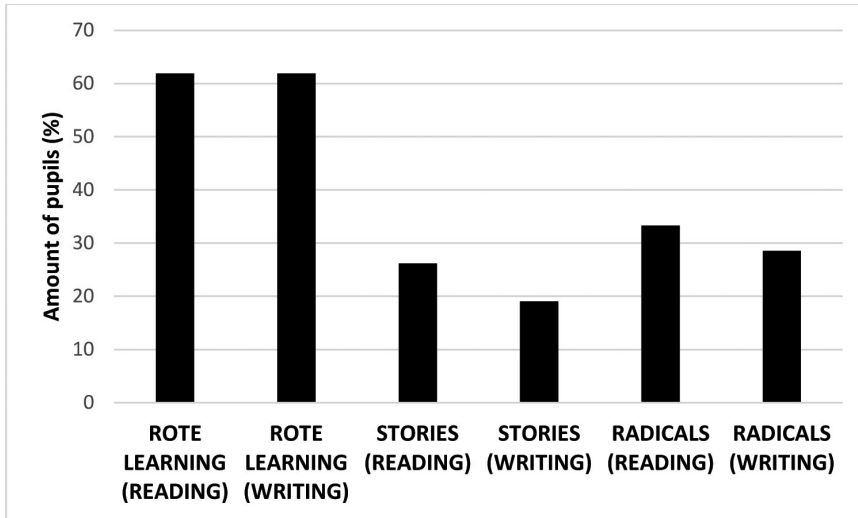

Figure 5.5: Percentage of pupils who, post-intervention, rated a strategy either 'often' or 'all the time' the most effective

As can be seen clearly in Figure 5.5, the percentage of pupils who perceived rote learning to be the most effective strategy for both reading and writing either 'often' or 'all the time' in the post-intervention questionnaire was significantly higher than that for any other strategy. The fact that the percentage of pupils who perceived rote learning to be most effective for reading (61.9 per cent) was nearly double that of pupils who perceived radicals (33.3 per cent) to be most effective, and the percentage for writing (61.9 per cent) was over double that of pupils who perceived use of radicals to be most effective (28.6 per cent), is quite a telling result. Use of radicals was perceived to be the second most effective strategy for both reading and writing Chinese characters and the use of stories for both skills (reading: 26.2 per cent; writing: 19 per cent) was perceived to be the third most effective strategy.

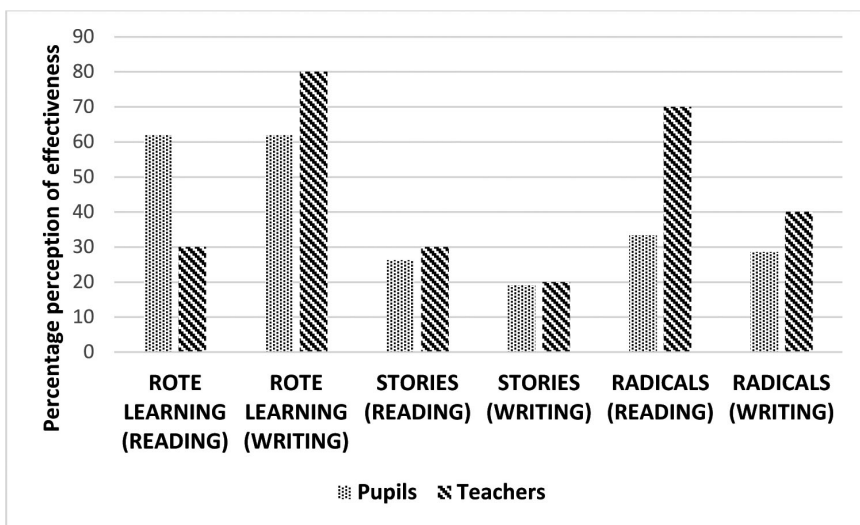*Is there a difference between teachers' and pupils' perceptions of the most effective learning strategies?*

Figure 5.6: Comparison of the perception of strategy effectiveness between the post-intervention pupils' and teachers' questionnaires

As Figure 5.6 illustrates, there were mixed levels of agreement between pupils and teachers when responding to how effective they perceived a strategy to be. The largest percentage difference in reported perception between teachers and pupils concerns the use of radicals for learning to read Chinese characters, with 36.6 per cent more teachers than pupils perceiving the strategy to be, often or all of the time, the most effective. Although the percentage difference is over one third and therefore appears large, it is important to recall that the sample size of the teachers group is very small and therefore 30 per cent of the teachers sample only equates to three people. The second largest difference in perception between the pupils group and the teachers group of the most effective strategy related to the use of rote learning for reading, where 31.9 per cent more pupils than teachers found the strategy to be, often or all the time, the most effective. Despite the small sample size of the teachers group, the large difference in the perception of the effectiveness the two learning strategies could be interpreted as concerning. It is, however, conceivable that, owing to their limited exposure and experience of learning the language, pupils' perception of the most effective strategy may be subject to change over time. Nevertheless, it would be advisable for teachers to address this large difference in the perception of these two strategies' effectiveness and explore what is at its root.

Reflections

The results are discussed here in terms of implications for practice:

1. ROTE LEARNING FOR WRITING

Teachers and pupils from both schools were unanimous in their perception that rote learning was the most effective strategy for learning how to write Chinese characters. The first key implication of this unanimous result is that teachers could ensure that sufficient lesson time is dedicated to discussing it and supporting pupils in the effective adoption of this strategy. Teachers could not only spend time convincing pupils of the benefits of this strategy, but also prove to them that, if they are willing to adopt this strategy, they could reap the rewards of their efforts in terms of developing their writing skills. It could be argued that, if pupils are taught how to utilize rote learning as a strategy effectively, and if they experience the benefits of the strategy, this would resolve many of their Mandarin Chinese language learning concerns. It must be noted that the perception as reported in the present investigation relates to beginner learners of the language and that this strategy may not be perceived as most effective by either intermediate or advanced learners. In addition, this research only concerns pupils' and teachers' perception of the most effective strategies and it cannot be claimed that the perceived most effective strategies are necessarily the best strategies. To suggest a strategy is the best, as opposed to perceived as the most effective, would require a much deeper investigation into the cognitive processes associated with each skill, which was not the aim of the present investigation.

2. DIFFERENCES BETWEEN PUPIL AND TEACHER PERCEPTION OF THE MOST EFFECTIVE STRATEGIES

The differences observed between pupils' and teachers' perceptions of the most effective strategies for certain skills relating to learning Chinese have important implications for teaching practice. The most noteworthy discrepancy between pupil and teacher perception relates to the use of radicals for reading. One should be mindful of pupils' relative lack of confidence in the effectiveness of radicals for reading compared with rote learning. Teachers should consider why this might be. It is possible that this discrepancy exists because radicals become more useful for learners who have reached an intermediate or advanced level of Mandarin Chinese: teachers are advanced learners of the language, whereas the pupils were beginners at the time this research was conducted. Nonetheless, it is the teachers' role to teach learning strategies that are most suited to their pupils' level of expertise, hence teachers should adapt their teaching to their pupils' level.

3. Pupils from different types of schools may prefer different strategies

The third and final implication for practice of the present investigation relates to the differing perception of pupils from a non-selective mixed school compared with pupils from a selective grammar school regarding certain skills. Like the observed differences between pupils' and teachers' perceptions, the main point of contention for pupils from the two different schools was the effectiveness of rote learning and radicals for reading. In both cases, there were considerable differences in perceived effectiveness. The implication of this finding on teaching practice is that teachers of Mandarin should be aware that different pupils perceive different strategies to be most effective. Classroom activities, homework activities, and assessments should therefore be designed to cater for these differences in perception. Furthermore, a range of strategies should be presented early on in the course of learning the language, so that pupils can select the one that they find most effective.

Discussion

We hope that the two action research projects conducted by teachers of Mandarin Chinese illustrated above have illustrated the kind of professional concerns that may motivate action research enquiries and ways of reporting them. We also hope to make clear that there is no one-size-fits-all pattern in action research. Teachers, in their projects, can research whatever issues interest them using various suitable methods and reporting their research in ways that often differ from more formalized academic research.

In Rob's project, he was initially interested in understanding the intelligibility of his students' spoken Chinese. By analysing the intelligibility breakdowns that emerged from the transcriptions of five Chinese high school students, he realized and argued that he needed to pay more attention to pronunciation issues in the classroom, with an increased focus on initials and finals alongside tones. Furthermore, he has conceptualized action research as a journey in which original research questions lead to more important ones. When reflecting on his project, he acknowledged that he is now moving away from a narrow focus on tones to identifying problems likely to interfere with intelligibility. The next phase of the journey will be to investigate whether a more explicit focus on tones, initials and finals in the classroom can actually lead to more accurate pronunciation. Rob recognizes that this action research project has directed him towards further research cycles. In Paul's project, he pointed out that, on a personal level, the investigation has instilled in him the importance of always being aware that different pupils may find different learning strategies more effective, although some strategies

appear more popular than others. Strategy selection should be presented as key in the early part of any Mandarin Chinese curriculum and should be reviewed at regular intervals throughout the course of a pupil's learning. He further contends that it is likely that more and more British pupils will learn Mandarin Chinese in British schools in future alongside the traditional European languages, and he hopes that his investigation may contribute to addressing some of the problems that pupils could encounter. Though each project is unique and uses different research methods, both emerge from the teachers' feelings of needing to improve or change their practice and to tackle problems in their teaching context. What is more significant is that their action research raises new areas or questions that may take them and the other teacher-researchers into further fields of investigation (Burns, 1999).

We hope this chapter has served its aim of encouraging teachers of Mandarin Chinese and teachers of modern foreign languages in general to carry out their own small-scale action research projects, as it is practical and teacher-friendly and can be used widely in the initial and continuing professional learning of language teachers. It is a way of improving teaching practice, as we can see from the two projects illustrated in this chapter. More importantly, we also see that the significance of doing action research for language teachers is that they can generate pedagogical theories. In the current MFL classroom, teachers are still seen as 'expert practitioners', not as 'expert knowers' in that 'many teachers see their practice as informed by common sense or practical wisdom and they talk about practice as activity, rather than as considered, committed and purposeful action' (McNiff and Whitehead, 2005; McNiff, 2013; 2014): teachers are often described as implementers of practice but not theorists of practice (McNiff and Whitehead, 2005; McNiff, 2013; 2014). This is where action research comes in. It can help teachers improve their practice, and it can also help them see their practice as a form of practical theorizing. Practice and theory are inter-related and should always inform each other. The authors of this chapter have therefore advocated that language teachers should be the decision-makers: they need to have a say in what counts as theory, curriculum and policy for language teaching. To do so, they need to take the initiative and be the creators and promoters of new theory and new pedagogy. Action research is a valuable tool for them to realize this goal. By doing so, teachers of Mandarin Chinese and other modern foreign languages will broaden the platform for sharing their work, engage in more professional discussion and debate on classroom research, and more importantly, help contribute towards foreign language pedagogy and policies, thereby ensuring that MFL teaching becomes properly embedded within school curricula.

Practical ideas

Below is a diagram showing steps involved in action research. Stages 1 and 2 are to identify and specify your area of concern. In Stage 1, the teachers usually define the purpose of their action research by asking themselves these questions: What is going on in my classes that is causing my concern? Why am I starting this action research project? Then you identify an issue that you would like to learn more about. For example: 'Some of the students are very silent and seem never to want to answer my questions or participate in activities.' In this case, it is suggested that you do some research about learner motivation and 'tips on activities design', which will inform you about what the other teachers and scholars say about second language learners in their language acquisition. In Stage 2, you turn the issue you want to investigate into a more specific question for action research. Ask yourself, 'how can I narrow down the issue under investigation to make it manageable within a specific time frame?' To continue with the example above, more specific questions may either focus on the learners' motivation: 'how do I improve students' learning motivation in classroom activities?' or on the learning activity design: 'what activities can make students more active in classrooms?'
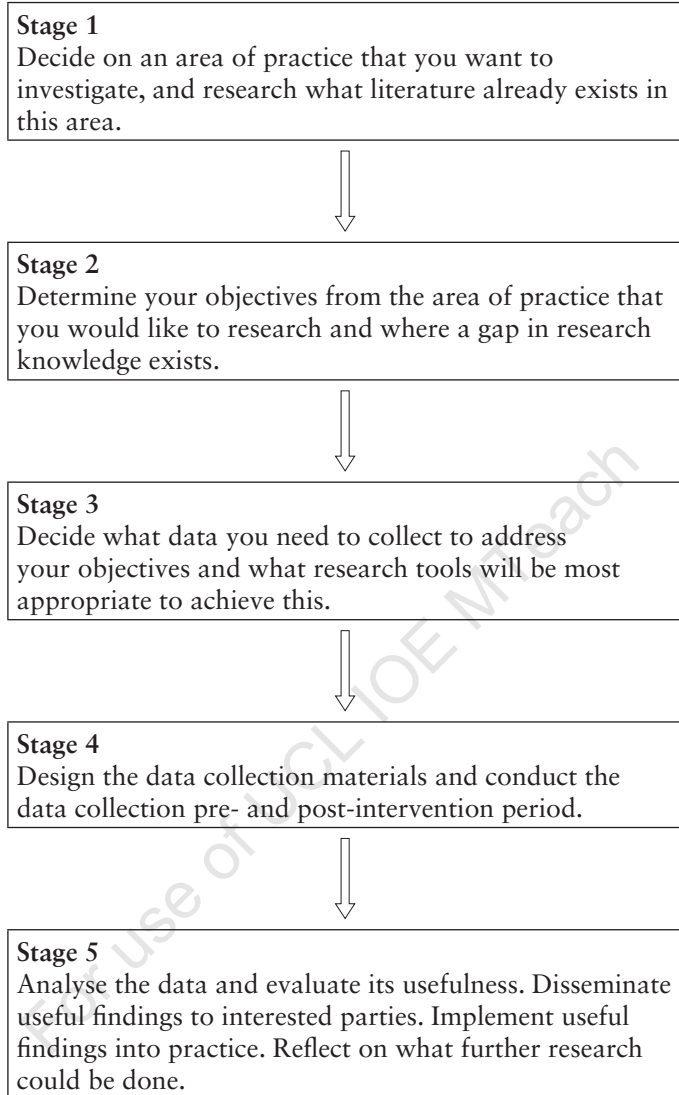
Stages 3 and 4 are to design data collection methods and match your data collection methods with what you want to find out. First ask 'how am I going to conduct the research?' or 'what data-collecting methods will I need, and why?' There are many different methods for collecting data in classrooms. Burns (1999: 79) gives a few examples of observational or non-observational approaches to data collection. Methods of collecting observational data include keeping notes of classroom happenings; writing diaries about feelings, interactions and activities; keeping audio or video recording of classroom interactions; and drawing maps, diagrams or layouts of teacher–student interactions. Non-observational methods include interviews, discussions, questionnaires and surveys; and collecting life/career histories or documents and policies. The teacher needs to choose the best and what appear to be the most revealing research methods, and to collect data in the classroom. Before collecting data, it is important to gain consent, i.e. permission for conducting research from your senior management team and from your participants (and if they are below 18, gain written permission from their parents).

In Stage 5, you are going to analyse data and disseminate it to attract opinions and make an impact. At the analysis stage, go through your data for broad patterns, ideas and trends that seem to address or answer your questions. You can develop tables, charts or sets of quotes to display in a concise form. Then think deeply about what the data are saying by reflecting beyond the immediate surface details and by reflecting again on your research questions (Burns, 2010). Then write down what you have found and participate in conversations, peer dialogues, workshops and school visits to share your research results with other teachers, scholars and policymakers.

While being aware that what we have presented is not exhaustive, we hope that we have provided you with some thoughts and advice on how to do action research by yourself. We hope that teachers will become 'expert knowers' who will be able to implement considered, committed and purposeful action in their classrooms. When they become theorists of practice via action research, they will be able to improve their own practice and have a real say in their professional practice generally.

Action research steps

> **Stage 1**
> Decide on an area of practice that you want to investigate, and research what literature already exists in this area.

> **Stage 2**
> Determine your objectives from the area of practice that you would like to research and where a gap in research knowledge exists.

> **Stage 3**
> Decide what data you need to collect to address your objectives and what research tools will be most appropriate to achieve this.

> **Stage 4**
> Design the data collection materials and conduct the data collection pre- and post-intervention period.

> **Stage 5**
> Analyse the data and evaluate its usefulness. Disseminate useful findings to interested parties. Implement useful findings into practice. Reflect on what further research could be done.

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