CHAPTER TWENTY SIX

Researching Language Classrooms

Lesley Harbon and Huizhong Shen

Research into what happens in language classrooms is an important area of applied linguistics research. Second language classroom research is in many ways the link between theory and practice (Lightbown 2000; Nunan & Bailey 2009). Well-planned and well-designed language classroom research can help us examine our theoretical assumptions as well as what happens in actual practice. There is also a wide range of aspects of language learning and teaching that might be examined in this research. This might include a focus on speaking, listening, reading or writing. It might examine the teaching and learning of grammar and vocabulary, or it might focus on issues in the area of pragmatics, motivation or identity development, to name just a few. Students and/or aspects of the teaching context itself can also become the focus of the classroom research. This chapter outlines current trends in classroom research. It will then discuss classroom observation and narrative inquiry as ways in which what goes on in the classroom might be examined. Finally, a sample study is described which employs classroom observation as its key research technique.

Much classroom research has come about because teachers are seeking to solve problems or answer pressing questions about their current teaching practices (Mackay 2006). The teachers themselves may undertake the research, as is the case with action research (see Burns this volume), or they can become the subject studied by a researcher who is not from the teaching context. Classroom research can aim to test a hypothesis, test a theory or even replicate an earlier study. Some researchers explore hunches they have

about their own teaching or student learning. Other researchers conduct research where funding has been granted for a specific purpose, so the focus of the research has already been established. Both quantitative (Phakiti this volume) and qualitative (Holliday this volume) methodologies can be employed in second language classroom research.

Often, classroom research requires the researcher to work closely with the language teacher. Arrangements need to be made about observation times and places. The researcher's presence should not impose on what is happening in the classroom and needs to be considered in any arrangements for data collection that will take place. Classroom teacher/researcher collaborations can be extremely fruitful (Lightbown 2000), and teachers will trust the researcher if all purposes and processes are made explicit to them through the period of the research (Nunan & Choi 2011).

Important considerations in second language classroom research

A glance through the contents pages of any of the current general research textbooks would see that there are often common stages in undertaking classroom research. Important reference manuals for this type of research include Denzin and Lincoln's (2005) *Handbook of Qualitative Research*, Cohen et al.'s (2007) *Research Methods in Education*, Arthur et al.'s (2012) *Research Methods and Methodologies in Education*, Cresswell's (2012) *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* and Lodico et al.'s (2006) *Methods in Educational Research*. Books that focus on classroom-based research, in particular, include Allwright and Bailey's (1989) *Focus on the Language Classroom*, Nunan's (1989) *Understanding Language Classrooms*, Nunan and Bailey's (2009) *Exploring second language classroom research: A comprehensive guide* and Wallace's (1998) *Action Research for Language Teachers* (see also Burns this volume).

In the early stages of the project, researchers need to consider their own beliefs and understandings of the topic. Researchers need to review the literature (primary sources especially) not only about the research problem itself, but also the research available on the method chosen for the project. The researcher then decides on the design, method, sampling and population, examines data collection instrumentation (and adapts or devises new versions), conducts the research and then analyses the data, reducing the data to smaller chunks of information, in order to link, compare and make meaningful findings from their study.

Researchers are obliged to conduct classroom research in an ethical manner. Much research is conducted under the auspices of higher education institutions, and such institutions have committees especially set up for

examining ethical procedures of the research undertaken in its name. Researchers need to follow research approval guidelines for ethical purposes. Research conducted with permissions and checks on ethical processes should guarantee anonymity and safety to participants.

From the time the research project is first conceived, right through to the point where the results are published, the researcher needs to aim for a positive, professional relationship with their participants. The researcher should never forget the human side of conducting classroom research. In the midst of all of classroom language learning and teaching, people are involved. The researcher, thus, must seek to develop good working relationships with the people involved in their project.

Research techniques and methods

Researchers can utilize a range of research techniques to gather data for language classroom research. For instance, introspective techniques such as think-aloud protocols and retrospective techniques such as interviews carried out after a classroom event has taken place have made an important contribution to classroom-based research. These techniques can be used to ask teachers and students to explain their thinking, beliefs and perceptions of what goes on in the language learning classroom (Mckay 2006). Researchers can also use diaries as a source of data. Studies of this kind, in which teachers or students write what they think about their teaching and learning, are another useful way of carrying out classroom-based research. Also, through the analysis of interactional patterns, researchers can examine teacher–student discourse in order to uncover patterns that may, in some way, impact on language teaching and learning (Duff 2007). Two further research strategies, classroom observation and narrative inquiry, are discussed below as ways of conducting language classroom research.

Classroom observation

Classroom observation is defined by Gebhard and Oprandy (1999, p. 35) as 'non-judgmental description of classroom events that can be analyzed and given interpretation'. Mackey and Gass (2005) describe how observations allow researchers to collect comprehensive information about types of language, activities, interactions, instruction and other notable events, most importantly, at close range. The researcher will choose to take observations of either the whole language classroom or aspects of it, or activities within it. Observations may be taken of the teacher, a student or students. With a teacher focus, these aspects may range from the amount of teacher use of the target language, teacher use of materials,

their handling of critical incidents, through to the type of praise given by teachers to student responses. With a student focus, the exploration can be anything from student questioning, to student eye contact with the teacher, to student participation in group work and more. As well, there are a multitude of aspects of the classroom context which can be examined, for example, gender and its impact on classroom processes, or issues of race. The number of research questions possible for language classrooms, thus, is considerable.

Researchers are also able to include *participant observation* or *non-participant observation* in their research design. In participant observation, the researchers take part in the classroom processes they are investigating, taking notes on what they observe. In non-participant observation, the researchers are present but do not participate in the classroom processes. Researchers are therefore free to take notes and work with any devices they need to help them record what is happening in the classroom.

The terms *emic* and *etic* are very often mentioned in relation to classroom research due to an adopted role of the researcher in classroom observations. Researchers who try to get an inside view of what is happening in the classroom take an emic perspective in their research, whereas researchers who take more of an outside view on the event take an etic view of this (see Starfield this volume).

The researcher can carry out observations of the language classrooms very simply. By that, we mean that all a researcher needs is a pen and paper to be able to take fieldnotes about what they observe at a certain point in time. Fieldnotes can provide detailed descriptions of people, places, activities and events and are taken in conventional notation (as fast as the researcher can write or type). Sometimes, however, there are more complex and structured approaches to observing language classrooms that might be used. Over the years, various observation schedules and schemes have been devised to take data from language classrooms.

Observational work came to the fore with the first well-documented scheme, known as the Flanders Interaction Analysis Category observation system (Flanders 1970) that allowed researchers to examine and interpret observable classroom verbal behaviours such as teacher praise, questioning, lecturing, giving directions and student talk or silence. The language teacher's classroom talk was divided into discrete categories which allowed the observing researcher to note down occurrences of the different categories of talk measured at fixed intervals and to assign numerical values to each of these. There was also describing, tracking of students' verbal behaviours in set of observational categories. Flanders' work led to many classroom studies applying using this system, or adaptations of it, to their own classroom research (see e.g. Harbon 2000; Harbon & Horton-Stephens 1997).

Critics of such structured systems claim, among other things, that the communicative language classroom is far too complex for all notions

to be labelled and captured in this manner, and that the essential communicative nature of the language classroom is lost. In response to those criticisms, more sophisticated observation schedules such as the COLT (Communicative Orientation of Language Teaching) scheme have been designed (Allen et al. 1984) and implemented according to a detailed coding manual (Spada & Fröhlich 1995). The Spada and Fröhlich manual (1995) has allowed users to capture more of the communicative aspects of the classroom than did the earlier Flanders's (1970) scheme. The COLT scheme is one, however, that requires the user to be trained in its methods to be true to the scheme's intentions.

Whichever strategies and techniques are chosen for classroom observation research, it is important that the researcher has a tightly structured and systematic data gathering instrumentation. It is important that the instrument could be used by another researcher in a replication study, and the same types of findings emerge.

Narrative inquiry

Early observational classroom studies quantified teacher–student interaction (Duff 2007). In the past twenty years, however, scholars have recognized that classrooms can be more fully understood from the views of participants. Narrative inquiry has come to the fore as one of the ways that second language classroom practices and processes can be explored and understood in this way (Barkhuizen 2011). As teachers' personal and professional narratives embody their knowledge, values and understandings of the classroom, narrative inquiry is increasingly common in second language classroom research. Narrative inquiry allows researchers to investigate educational practices and explore different phenomena through the teachers' or their students' personal life stories (Zhao & Poulson 2006).

There are no specific steps for conducting narrative inquiry; however, the end point must be the formulation of narratives. Barkhuizen's (2011, p. 398) reminder is that 'narratives are discursive artifacts, and, whether written, spoken, or visual (e.g. drawings, drama), are constructed in particular contexts'. Zhao and Poulson (2006) describe biographical narrative inquiry and their suggested strategy to elicit teacher narratives. First, they suggest undertaking an initial interview and then require their informants to narrate their personal and professional timelines and career paths, such as might be found in an oral history. After recording and transcribing this material, the accuracy of transcription is established by presenting informants with hard copies of the data to read and check.

A narrative analysis then follows. The researcher places together the larger narrative accounts which have been gathered during the initial interview phase. These may be accounts of classroom phenomena, actions,

moments, metaphors and people. The accounts are then synthesized or condensed to create focused episodes or stories. They are matched with and give further insight into the biographical data gathered earlier. What is key with narrative inquiry is that metaphors are identified and stories are constructed to produce narrative episodes.

Researchers are wise to heed Barkhuizen's (2011, p. 393) reminder that 'narrative researchers are intimately implicated in their research activities'. As researchers become closer to the storytellers, they cannot help but become close to the storyteller and the stories. Acknowledgement of this relationship is essential.

The stories of three teachers in Golombek and Johnson's (2004) narrative inquiry study are an example of this. The reader of the research report meets the three teachers, Jenn, Michael and Lynne and their teacher-authored narratives as they make links between their teaching and their students' learning. Jenn's narrative of her practice is told through her story depicted as one of 'forgiveness and power in the classroom'. Michael's teacher narrative is told through the story of 'giving children quiet space'. Lynne's teacher narrative is told through the story of her 'letting … students read'. According to Golombek and Johnson (2004), the strength in such a narrative inquiry is how they are able to show, through teachers' own voices, how teachers come to know about their work, as well as what they come to know.

This type of narrative research, then, allows 'fuller, more textured, humanized, and grounded accounts of the experiences of teachers and learners in contemporary classrooms' (Duff 2007, p. 983) than might be obtained with other research methods which take a more distanced view of what is happening in the language learning classroom.

Validity and reliability in classroom-based research

It is important for researchers in language classrooms to consider the validity and reliability of any data collection instruments they employ. A simple set of questions can provide useful assistance to guide the researcher from the conceptualization stage right through to the final reporting. Such questions may be about whether the instruments:

- provide the data which the researcher intended to gather;
- capture all that is required about the people, classroom context, interactions and activities that are being examined; and
- were familiar enough to participants to cause as little disruption to the regular processes of the classroom as possible.

With observation instruments, the researcher must ensure that all those who will use the instruments are thoroughly trained and given sufficient opportunity to gain experience in its use in a number of situations, or pilot studies, prior to the main study. The same goes for the interpretation of observations. It is useful to work with other researchers in this so as to avoid the misinterpretation of events.

Problems associated with researching language classrooms

Researchers need to consider the problems they might encounter in undertaking classroom research. Both in observational research and in narrative inquiry, there are a number of limitations that need to be acknowledged. With classroom observation, the data collected really just portray snapshots of limited periods of time. The conclusions drawn are thus tentative and at best can be taken as indicative rather than conclusive. Other problems with gathering classroom observation data are concerned with issues of consistency in the data gathering. The researcher must ensure the research questions are tightly linked to the data collection and analysis, so that the research can truly be considered to be a reflection of what it aims to research. The researcher's tight control of the relatedness of research questions, method, analysis and interpretation underpin the strength of the validity and reliability of the research findings.

The phenomenon of a researcher observing classrooms brings in the issue of having an outside observer, or possibly a participant observer taking part in classroom activities. Cameras pointing at the teacher or students, audio recording devices placed near classroom members, all add to creating the impression that the classroom is 'on display'. The fear is that data collected if participants are 'playing to the camera' may not be as real a picture as possible. The researcher thus needs to ensure that the participants do not act or behave in a way that will impact on the researcher's attempt to obtain a 'real' or 'natural' view of the classroom processes under interrogation.

A sample study

The sample study chosen here as an example of second language classroom research is the paper, 'Where is the technology-induced pedagogy? Snapshots from two multimedia EFL classrooms' reported in the *British Journal of Educational Technology* (Zhong & Shen 2002). The research primarily employed classroom observation focusing on three aspects of the teachers' language pedagogy: the approach of the teacher towards teaching, the

design of the course taught and procedures chosen for language teaching and learning in two multimedia English as a foreign language (EFL) classrooms.

The paper reports on a study set in a school in China where the language curriculum was becoming increasingly oriented towards and linked to information and communication technologies (ICT). The study was conducted in two ICT-supported EFL classrooms. With a school ICT integration orientation, there was an assumption that there would be technology-induced pedagogical changes in the EFL classroom. The researchers set out to test the hypothesis that 'there is no technology-induced pedagogy', which is implied in the title of the research paper: 'Where is the technology pedagogy?' The subtitle 'Snapshots from two multimedia EFL classrooms' defines the nature and scope of the study. The study was a classroom-based project that used observation as its key research strategy.

After defining the study, three research questions were framed which were closely related to the research purpose and issues under examination. The research questions were: (1) What pedagogical models do teachers use in the multimedia classroom? (2) How does the multimedia classroom differ from the pre-multimedia classroom in classroom interaction? (3) What is the role of the teacher and the student in the technology-enhanced learning environment?

In the early sections of the paper, the researchers provide a simple outline of the key notions they found in the literature review which informed their decisions to undertake the project as they did. They note other studies which examined similar issues and the conclusions that had been reached in those studies.

Classroom observation was used as a key research strategy. The collection of the data, however, went beyond one single method. Based on the understanding that qualitative language classroom research is holistic in nature, the researchers saw no reason why research into the language classroom could not include elements of other research methods. The researchers examined teachers' detailed lesson plans as well as the courseware they had designed as an added way of collecting and validating the data gathered from in-class observation and videotaping. This allowed the researchers to cross-check the findings which contributed to establishing validity within the research.

Video recording of the classroom processes was effective in that it captured precisely what was happening in the multimedia language classrooms in teaching and learning, the context in which learning was taking place as well as many of the less-observable aspects of the classroom dynamics such as participants' general demeanours and other non-verbal actions in the process of classroom interaction.

Much of the data gathered from these instruments, however, was not used in this study. This is common practice, especially when researchers undertake a study with a very clear purpose in mind such as writing a paper for a specific academic journal. In this study, the researchers examined

and analysed only the most salient data which enabled them to provide an account or interpretations of what they believed to be the realities of instructional practices and processes in the two Chinese English-language classrooms.

The qualitative exploration of the instructional procedures aimed to capture the classroom culture in a holistic way. However, the researchers claimed to be aware that they may not have observed everything, as what they observed was only the tangible part of the classroom processes and interactions. As non-participant classroom researchers, they were only exposed to what was occurring around them in the classroom at one point in time. The researchers did not claim to be inside the thinking of the teachers and students concerning the research focus.

The less-easily-observable elements of a second language classroom like this could, nevertheless, be reconstructed utilizing other research methods such as narrative inquiry, discussed earlier in this chapter. By interviewing the participants and inviting them to talk about their life histories, particularly critical incidents that happened in different points in time in their life, linking to images and metaphors of classroom incidents, the researchers may have been able to better understand the hidden factors such as traditional Chinese cultural and educational assumptions and practices, which may have contributed to who the participants are and what they believe and do in the classroom.

When designing a qualitative research into a language classroom, it is crucial to take into consideration the physical context in which the research is conducted. It often helps to establish a profile of the research site, including a brief description of the institution, its vision and expectations, the detail of the sample, specific techniques for ensuring a non-obtrusive approach to the classroom, research constraints and ethical considerations. These are included in detail on pages 40–43 in the published study (Zhong & Shen 2002).

The research questions were addressed by examination of the videotaped observations and examination of teachers' lesson plans. The focus of the observation was on the teacher and aspects of the context of teaching and learning in the two multimedia language classrooms. It was anticipated that this could be best addressed by observing how the teachers taught. A comparative study of the approaches the teachers employed, as well as the materials and tasks they designed for classroom interaction in the two multimedia EFL classrooms, may provide empirical evidence to show how a multimedia English class differs (or not) from a traditional language class through a qualitative analysis of the learning events and instructional sequence recorded during classroom observation.

In the sample study, the researchers chose two schools, a government school and a private school in China. The government school was a selective school with good computer networks and an innovative language curriculum. The private school was well-resourced and keen to integrate

ICT into the teaching and learning at the school. This was followed up with a description of the classes to be observed as well as the teachers and the materials they would use for teaching in the two multimedia EFL classes. Pseudonyms were used for the two institutions and the teachers involved in the research project to protect their privacy.

Prior to the commencement of the actual research, permission was obtained in which the nature, scope and involvement of the school and participants were clearly outlined. The schools and the participants were also made aware of, and agreed to, the procedures of data collecting, validating and reporting.

As discussed above, data collection for this study involved classroom observation, video recording and examination of teachers' lesson plans. Once data were collected from the classes, they were then analysed. The researchers also cross-checked the data from classroom observations against the teachers' lesson plans to identify the structure of the lessons. The researchers found that the two multimedia lessons were sequenced in a similar way, consisting of five phases: *revision, presentation, reading, practice* and *consolidation/homework*. The basic structure of the two lessons is shown in Figure 26.1.

Figure 26.1 is a graphic representation of the lesson construction showing the various phases and their relationships in the classroom instruction. The figure shows how the researchers reduced the whole gamut of classroom practices to meaningful data. The analysis of the events and tasks for different phases highlighted the role of the teacher and the students in the classroom as well as the function of the computer in each of the five phases. The computer was used in class not as a medium for interactive learning but an electronic tool for the teacher to present lesson materials in a teacher-led manner.

In the qualitative analysis, the researchers also examined in detail a range of lesson elements. It was found that new technologies were used

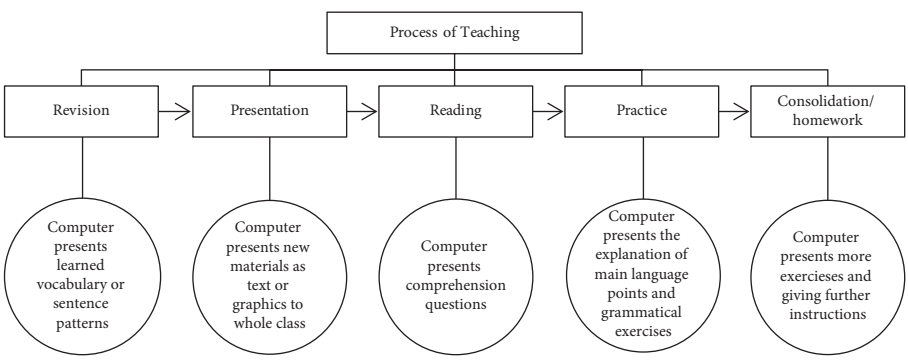

FIGURE 26.1 *Structure of two lessons and the use of computers (Zhong & Shen 2002, p. 41)*

as accessories and classroom procedures and were predominantly teacher-driven. A linear sequence tended to be followed with a focus largely on language forms. The use of computers in the language class did not bring about any pedagogical changes, as teachers simply used their traditional method of language teaching in the multimedia classroom. There was very little difference between the traditional English classroom and the multimedia classroom, and teachers retained a dominant role in knowledge transmission with students still on the receptive end of the continuum, something that neither of the researchers had anticipated. With this and other related findings, the researchers concluded their research.

Resources for further reading

Barkhuizen, G 2011, 'Narrative knowledging in TESOL', *TESOL Quarterly*, vol. 45, no. 3, pp. 391–414.

Barkhuizen, G (ed.), 2013, *Narrative Research in Applied Linguistics*. Cambridge University Press, Cambridge.

This book is for researchers wishing to confirm definitions, dimensions and methodological aspects of narrative research. Readers can essentially explore what narrative research is all about, its theoretical base, how narratives are constructed and how they are co-constructed. The general structure of the chapters allows easy navigation.

Barkhuizen is guest editor of this special issue of *TESOL Quarterly* and provides not only information about processes involved in narrative inquiry, but also introduces the paper authors thoroughly, seeing the synergies between each paper for better understanding of this research strategy.

Barkhuizen, G, Benson, P & Chik, A (eds), 2014, *Narrative Inquiry in Language Teaching and Learning Research*. Taylor & Francis, New York, NY.

Readers are guided through key aspects and published research on oral, written and multimodal narrative, as well as data analysis and reporting issues. There is advice given about all aspects of narrative inquiry research. The authors state their awareness of both investigating and writing narratives, and that the information provided becomes a 'map' rather than a 'set of guidelines'.

Duff, PA 2007, 'Qualitative approaches to classroom research with English language learners', in J Cummins & C Davison (eds), *International Handbook of English Language Teaching*, Springer, New York, NY, pp. 973–986.

Duff's chapter in this handbook is an all-important read in any preparation to undertake language classroom research. As well as outlining the features of qualitative classroom research, she considers some properties of qualitative research, paradigm debates, the role of triangulation, emic perspectives, collection methods in qualitative research, combining macro-level and micro-level ethical issues and criteria for evaluating qualitative research.

Gass, SM & Mackey, A 2011, *Data Elicitation for Second and Foreign Language Research*, Routledge, New York, NY.

Chapter 8 in this volume is titled 'Classroom-based research', and after discussing naturalistic classroom research, the authors concentrate chiefly on observational research in language classrooms, deconstructing observation schemes and the steps, stages, processes and 'etiquette' of undertaking observational classroom research.

Holliday, AR 2007, *Doing and Writing Qualitative Research*, 2nd edn, Sage, London.

Holliday's volume is an easy-to-read text that deals with various aspects of qualitative research, from the basics of starting out, deciding on the question and project, right through to data collection strategies, and writing up findings, much of which is relevant to classroom research.

Hopkins, D 2008, *A Teacher's Guide to Classroom Research*, 4th edn, McGraw-Hill, Maidenhead.

This very practical guide, now in its 4th edition, encourages classroom teachers to undertake classroom research. With very solid arguments in the first and last chapters outlining reasons why classroom teachers *can* and *should* undertake classroom research, the remaining chapters help teachers to refine a research focus, to plan for observations and to gather, analyse and report on research findings. It is written in an easy-to-read style, so as to instil confidence in teachers considering taking up the research challenge. Although not specifically written for language teachers, it is still very applicable to second language classroom research.

Nunan, D & Bailey, KM 2009, *Exploring Second Language Classroom Research: A Comprehensive Guide*, Heinle, Cengage Learning, Boston, MA.

This volume is certainly comprehensive, as the title suggests. Part I introduces second language classroom research, defines key concepts and guides researchers to start their projects. Part II covers experimental classroom research, survey, case study, ethnography and action research. Part III has closest links with this chapter, because of its focus on classroom observation. Covered also in the remainder of the volume are introspective methods, elicitation and analysis.

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