Chapter two: ReSIG pre-conference seminar

2.1 Doing research to find answers to your questions – *Sarah Mercer, Daniel Xerri*

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Introduction

Research has the potential to be an important source of professional development for teachers (Atay, 2008). It enables them to link theory and practice, and to practise theory while theorising practice. It provides teachers with the means to engage in informed pedagogy and it makes better teaching possible (BERA-RSA, 2014). However, due to certain deep-seated beliefs about the nature of research and about who is entitled to conduct it, classroom practitioners sometimes shy away from engaging in this activity (Borg, 2009). Certain inhibitive beliefs lead some teachers to conceive of research as something that has to include statistics and complex kinds of analysis, or has to involve proving a hypothesis. They may see research as something far-removed from their practice and daily concerns or, in the worst case, as having no relevance for them and their work. They may come to associate research exclusively with academia and refuse to consider the possibility that it could ever form part of their professional identity and practices. Narrow conceptions of research make certain teachers feel alienated from this activity and discourage them from seeing it as something that can lead to professional growth. In this summary, we argue that research is much more varied than some might believe. Rather than being something inaccessible to teachers, it is actually one of the best ways for classroom practitioners to find answers to questions about their practice.

Daniel Xerri (left) with Evan Frendo

What is research?

Questions are the primary driver for most research. In fact, empirical research is described as the systematic approach to finding answers to one's questions (Hatch & Farhady, 1982, p. 1). It involves asking appropriate questions, understanding and employing systematic approaches, and generating possible answers. According to Hurston (1996), "Research is formalized curiosity. It is poking and prying with a purpose" (p. 143). That sense of purpose is what makes Punch (2006) describe research as "organised common sense" (p. 7).

As a form of "disciplined inquiry" (Dörnyei, 2007, p. 15), research involves a process typically comprising the following stages: identifying a research area, designing a research study, conducting research, analysing research results, and publishing research. These stages can be further subdivided into other stages. Appendix 1 consists of a number of questions that are meant to help you reflect on the different stages of the research process. Even though you might expect research to be a highly organised and neat process, in reality it is much messier and the different stages do not necessarily follow one another in a linear manner. Despite all these stages, it is important to keep in mind that research "simply means trying to find answers to questions, an activity every one of us does all the time to learn more about the world around us" (Dörnyei, 2007, p. 15). This democratic notion should help to dispel the mystique that surrounds research for some teachers. It is something everyone does to differing degrees in their everyday lives.

Research is not only an activity that all teachers can do, but it is also something that can be done in lots of different ways. Even though it can involve statistics and vast numbers, it does not have to do so. There are many equally valid and rewarding alternative approaches. In fact, there is great value in tapping practitioners' own knowledge and experiences with respect to a specific context in order to generate answers to the questions they may have. In teacher-driven research, the impetus is most often provided by practice rather than theory. It includes asking questions about teachers' practices, their students, context and professional identity; generating data in a way suitable to answering these questions; analysing and reflecting on the generated data; and sharing these findings with others in some public way, not necessarily in the form of a written publication or formalised presentation.

Different approaches to research require different understandings of what constitutes good research. The latter is not only defined in terms of validity, reliability and replicability. While these principles are helpful for those conducting quantitative research, as a teacher-researcher or for those doing qualitative research, it is better to adopt the principles of thoroughness, transparency, honesty, reflexivity, openness to alternative interpretations, and trustworthiness.

Asking questions

A good research question is the foundation when doing a study. According to O'Leary (2004), a research question serves to define an investigation, set the boundaries of the study and provide direction. It means knowing what you want to find out and being clear what your focus is. However, good research questions take time to formulate well and doing so is not a straightforward journey.

To construct a research question, you typically start by defining a topic, which involves using your creativity and curiosity as well as bearing in mind any practicalities (O'Leary, 2004, p. 33). You then move on to generating questions in order to find an angle on the topic you wish to investigate (O'Leary, 2004, p. 33). The questions enable you to identify a perspective as you begin to narrow down the scope of your study. These are some ideas of how to generate questions:

1. Consider your personal experiences or observations – What puzzles you?
2. Try turning a familiar idea on its head, looking at it from different angles and a fresh perspective.
3. Think about a theory you are aware of, but which doesn't appear to match your reality.
4. Think about a gap in the existing literature.
5. Try to think creatively about your topic – use metaphor, images, song, etc.
6. Create a mind-map to look for connections between related areas.
7. Think of any cases of uniqueness/exceptions.
8. Think of what you do not know.

In the process of generating questions, it is better to have lots of diffuse questions before you start looking for connections and honing your focus. Ultimately, the aim is to arrive at researchable questions, which can be answered through the research process. Moreover, one of the defining characteristics of good research questions is whether they are doable in practical terms given a lack of time, funding, ethical clearance and expertise (O'Leary, 2004, pp. 39–40). Can you collect data that will be able to answer your question(s)?

O'Leary (2004) makes a number of recommendations on how to verify the soundness of a research question. One of the most important considerations is that good research questions are interesting and worth investigating. They should be interconnected meaningfully with each other and their wording must be unambiguous. Care needs to be taken not to use loaded terms, to avoid making assumptions, and to set appropriate boundaries and focus. It is well worth keeping in mind that questions to which the answer is 'yes/no' are limiting. However, you must also remember that 'Why?' questions cannot be answered objectively. First, ask 'What?' and 'How?', and then 'Why?'

The formulation of a research question is an iterative process (O'Leary, 2004). Research questions are not static and may develop over time through reading, conversations, pilot studies, and the acquisition of new information at every stage. Data analysis may also lead to new research questions. In fact, you may well end up with two sets of questions: one to begin with that guides the study, and one emerging from analysis. The important thing to remember is to set out collecting data with a clear question in mind so you do not collect useless, diffuse and irrelevant data.

Finding answers

Once you have constructed your research questions, it is important to consider how you are going to go about answering them. This involves creating your study's methodological design. There are numerous possible ways to answer your research questions but you must choose the one that is most likely to help you answer your specific research questions and which works well for you as a teacher-researcher – epistemologically and practically in your specific setting (O'Leary, 2004). The decisions you take with respect to your methodological design are highly significant and will have an impact on the kind of data you collect and on how well it answers your questions.

Empirical research is about generating data that is used to answer questions, and to test or develop ideas. The two kinds of data that you can choose to collect are quantitative or qualitative. Simplistically speaking, the former consists of data primarily in the form of numbers, while the latter is data made up of texts and visuals. This is a very basic and highly simplified overview of quantitative and qualitative methods:

Quantitative

- Collects data that is analysed in numerical or statistical terms
- Useful for describing trends and relationships between variables
- Often narrow, highly focused questions
- Often large scale and survey methods
- Intended to be objective and with a lack of bias
- Issue of generalizability

Qualitative

- Collects textual or visual data
- Useful for understanding and exploring phenomena
- Often broad, general issues
- Often small scale
- Often interested in participants' perspectives
- Often analysed for themes or description – concerned with meaning, not quantity
- Acknowledges subjectivity and may be interpretative
- Issue of uniqueness

The dichotomy between quantitative and qualitative often reflects different ways of thinking and different ways of conceptualising the issue being investigated. It can also reflect different ways of working with data. The two approaches reflect various understandings of the nature and status of knowledge. Quantitative is more typical of positivism and empiricism, whereas qualitative is more typical of subjectivism and constructivism. However, there are similarities between the two and hybrid forms exist. Moreover, it is also good to remember that in reality the dichotomy is more of a continuum given that a study is likely to mix both types of data by using a mixed methods approach. Using such an approach would entail thinking about the sequence of methods you intend to use and their role in your study. Essentially, when teachers choose an approach to researching their classroom lives, they are likely to make pragmatic decisions and choose the approach most likely to answer their questions in a way that is accessible to them and of interest.

The decision about which tool to use to collect data will often reflect this preference for more quantitative or qualitative types of data. While not meant to be exhaustive, below is a list of some of the methods that you could consider employing in order to answer your research questions:

- Questionnaires
- Interviews/focus groups
- Observation/field notes

- Think-aloud/verbal protocols
- Journals/diaries/blogs
- Narratives/life histories (oral or written)
- Documents/tests/audio-visual
- Role plays/simulations
- Pictures/images/photographs

Some methods can be used in combination with others to ensure you get a balanced, rich picture of the issue being investigated. Methodological triangulation helps to make a study more robust given that different methods complement each other, make up for each other's disadvantages, and enrich the collected data. Whichever methods you opt for, you need to keep in mind the kind of research questions you want to address, and to make the best choice for you and your study. There is no one best way to conduct research and you have to find the way that works for you.

Conclusion

As shown by the various publications produced by the IATEFL Research SIG (ReSIG) over the past few years, there are a host of benefits for teachers doing research in their own contexts. Teacher research is not only a means by which a teacher can grow professionally, but is also a significant means of enhancing language learning and teaching. Above all, we find it fun and fascinating to do.

If language teachers wish to research their contexts, it would be important for them to be provided with the necessary support to develop their research literacy (Xerri, 2017, 2018). This involves having the knowledge and skills to write effective and researchable research questions, being able to select an appropriate way of answering these questions, designing research instruments, and collecting and analysing the data generated by these tools. However, we feel that first and foremost it involves equipping teachers with the attitudes and beliefs required for them to conceive of themselves as research-engaged professionals, that is individuals who are willing to find answers to their questions by doing research.

As we explained at the outset, there may first be a need to challenge preconceived notions of what research is so that teachers can relate to and identify with research as something they can and perhaps want to do. The pre-conference seminar we led at the 2017 BESIG Annual Conference in Malta was a modest attempt to fulfil that purpose. As outgoing Joint ReSIG Coordinators, it served to confirm our conviction that teacher associations can play a crucial role in developing the research literacy of their members and encouraging teachers to see research as an exciting, interesting and manageable way of enriching their professional practice.

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Appendix 1
These questions are meant to help you reflect on the different stages of the research process.

Stage 1
- What topic are you working on/would like to work on?
- Why is this topic interesting in your opinion?
- How will researching it be useful for your practice?

Stage 2
- What is/are your research question(s)?
- Is/are the question(s) well-formulated and researchable in practical terms?
- Why does/do this/these specific question(s) need asking?

Stage 3
- Operationalising your research questions. To make your research questions researchable, you have to define exactly what you mean by the terms you use.
- Take at least one term and explain exactly what you understand by it and how you would recognise it in your data.

Stage 4
Methodological design:
- What tool(s) would you use to generate data? Why? Why not a specific other tool?
- What are the shortcomings of your tool?
- What sort of data would it generate?
- How does/do the tool(s) relate to your research questions?

Stage 5
- Who are your participants?
- Why this group and not another?
- What ethical concerns do you need to accommodate?
- What contextual parameters and particularities of these participants need to be considered?
- What is your relationship to the context? Do you have subjectivities to manage?

Stage 6
- How would you analyse your data?
- What kinds of insights would it give you?
- What would it not tell you?
- What would you do with your results?

Stage 7
- What needs to be done next?
- What time plan do you have for doing this?
- What would you still need help with?