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Asking Questions in the Qualitative Research Context

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Abstract

Research is based on a constant questioning process. All researchers should ask questions in every research phase, what is read, the research design definition, data analysed and the way they are discussed and how their conclusions are drawn. It is generally accepted that to start scientific research, irrespectively of the area of expertise, the starting point is the drafting of one or more research questions, ordinarily known as a research problem. However, for many, starting with a research programme, the idea of formulating one is always a challenge. Some do not know where to start and question whether the question is well formulated. Given these issues, this paper aims to clarify and reinforce the importance of formulating the research problem and/or question, where to get inspiration for its compilation, what are the steps to be followed for its refinement and what is its usefulness during the research process. We also intend to recommend the use of some software packages that may assist the researcher, during questioning in other research phases, and thus maintain internal coherence throughout the research, as well as obtain an answer to the research question.

Keywords

Questioning, Information and Communication Technology, Qualitative Research

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Asking Questions in the Qualitative Research Context

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Research is based on a constant questioning process. All researchers should ask questions in every research phase, what is read, the research design definition, data analysed and the way they are discussed and how their conclusions are drawn. It is generally accepted that to start scientific research, irrespectively of the area of expertise, the starting point is the drafting of one or more research questions, ordinarily known as a research problem. However, for many, starting with a research programme, the idea of formulating one is always a challenge. Some do not know where to start and question whether the question is well formulated. Given these issues, this paper aims to clarify and reinforce the importance of formulating the research problem and/or question, where to get inspiration for its compilation, what are the steps to be followed for its refinement and what is its usefulness during the research process. We also intend to recommend the use of some software packages that may assist the researcher, during questioning in other research phases, and thus maintain internal coherence throughout the research, as well as obtain an answer to the research question. Keywords: Questioning, Information and Communication Technology, Qualitative Research

Formulating a question is a fundamental skill for anyone conducting research. Drafting good research questions is the first and essential step in every research project. These questions determine the focus of the work and provide guidance for the entire process, enhancing the quality of the final product (Neri de Souza, Costa, & Moreira, 2011b).

In research in humanities and social sciences, questioning takes place throughout the entire research process, and it is of great importance in qualitative research. How and why? To answer this question, we must quickly analyse what they are, how they are formulated and what is the nature of the research issues in qualitative research, and then discuss and provide examples of questions throughout the process, as well as provide some notes on the support of technologies.

According to Sandelowski (2008), in quantitative studies, research questions are always specified prior to the study, in contrast to qualitative research that can emerge during the study, and thereby progressively, reach the issues that are relevant to the study. The author justifies arguing that research questions, within a quantitative framework, restrict and compromise the research and the variables that will be covered. The research issues, within qualitative research, are sufficiently broad to allow specific exploration of specific experiences, events, artefacts, concepts or other empirical or analytical issues that will become the focus of the study.

Balancing the issues in qualitative research is more demanding because it must be well defined and, at the same time, be flexible and open to the intervention of the contexts and data analysis. In qualitative research the research questions are ultimately the result of curiosity, concern or the investigator's fascination for a complex and holistic context and not a mere measurement of controlled variables. However, despite the researcher's curiosity being of the utmost importance, for White (2009) research cannot be based on "idle curiosity," which will result in a random research design with little value and use for its findings. We agree with the author when he says that curiosity must involve a systematic and disciplined manner of

working. Therefore, clear and well-structured research questions are the result of the balanced combination of curiosity, creativity and persistent work.

For White (2009), when formulating research questions, curiosity is more effective when following three generic steps: “i) think imaginatively on the type of question that could be formulated in a given field that is of interest to you; ii) try not to be constrained by the previous works in this field, either in terms of questions or method; iii) think about the types of responses that your questions in particular may produce, but always keep an open mind on what you may find” (pp. 6-7).

Why do we need research questions? At least for three reasons:

- 1) They act as a compass in the research process,
- 2) They facilitate discussion of the results and conclusions,
- 3) They help communication with the scientific community.

What Is a Research Question?

We start by first analysing what a research question is. Are these questions of the same type as those made in other contexts? Here, it is clear that not all questions are problem questions. The distinction for these two words in Portuguese can be developed further through the work of Neri de Souza (2006): when you define that a question involves greater depth, abstraction and cognitive complexity, and that it can be formulated even without being in the form of a question, i.e. with a question mark at the end of the sentence. Since we almost always write questions in the interrogative form, we can say that generally all problem statements are questions, but not all questions are problem statements.

On the importance of research questions in research projects, Baker (2002) reports the two main problems that are on the basis of a manuscript being rejected to be published in a scientific journal in science education: (i) the study has no scientific basis to guide it, and (ii) the research problem or question is not relevant. However, for White (2013), it is the neglect of research questions in texts on methodology and academic literature in general that matter. The problem of lack of research questions is not unique to students and early-stage researchers. White (2013) points out that experienced researchers also pay little attention to research questions in their work.

For Lewis and Pamela (1987), a research question is one that spells out precisely the focus of the investigation. The research question or questions is/are the first and vital step of the investigation. In order to emphasise this, we believe that the research question or questions are half of a scientist’s work. A scientist is someone who knows how to formulate interesting and profound questions about their work area and their relationship with other areas and with the world. Research questions are the guides that direct the type of search for the information needed, the manner in which the information should be collected and the definition of the *corpus* of data. These questions are also fundamental in the analysis of the collected information and help the researcher not to waste time on the incidental aspects of the research, while holding a steady course towards the conclusions and possible answers. Many researchers get lost in some of these stages, simply because they have not clearly defined or presented their research questions to guide them. Therefore, one can never be reminded enough that all time “lost” in defining the research questions is never wasted (Neri de Souza et al., 2011b; White, 2013).

A research question should be:

- 1) relevant to the field of knowledge,
- 2) specific, and

- 3) without a preconceived answer.

When formulating a question to which one already knows the answer or how to find the answer directly, we may be faced with a false research question. The characteristics of a research question go beyond its relevance and feasibility; these also have to do with it being original, ethical and challenging. As can be seen, balancing all these factors in a research question is not an easy task. Although the formulation of research questions is scorned or even overlooked altogether by many researchers, they are central to the entire research process (White, 2009, 2013). In short, research questions should have apparently four contradictory “C’s”:

- 1) Clear,
- 2) Concise,
- 3) Centred, and
- 4) Complex.

Where Do Researchers Find “Inspiration” to Formulate Relevant Research Questions?

Of course, there is no magic formula for the formulation of well-founded scientific questions, nor infallible techniques to establish scientific problems. Also, remember that asking questions is a highly specialised skill that requires critical thinking, reflection, creativity, knowledge, abstraction and practice. According to Neri de Souza and Neri de Souza (2011) we generally have five main sources for formulating research questions:

- 1) Published materials such as books, scientific articles, reports, etc.;
- 2) Personal experience in the field of work and in the research area;
- 3) Experience of work and research colleagues, namely, the appreciation of the vision of the other;
- 4) Discussion with experts in the area of study with privileged views of the systems and problems;
- 5) Theories and bases in epistemological and philosophical studies in the area.

Many of these sources of “inspiration” for the above mentioned scientific inquiry are also discussed by Lewis and Pamela (1987). On the role of theory as a basis for inquiry, for example, Baker (2002) states, as regards research in science education, that:

Theories give rise to problems and questions, guide the choice of methodology, and provide an interpretive lens for data. Theories situate the study in an ongoing line of research in science education and provide a rationale and relevance for the study. Theories are the framework of any good study and help organize the manuscript. (Baker, 2002, p. 176)

It should be noted that, in the opinion of this author, theory guides the process of survey questions. We believe that questioning can also guide the choice of the theoretical or methodological basis for the resolution of a given problem. When a study does not have theories that support it or research questions that guide it, it ends up with a mixture of meanings, “a bag of data” that is inappropriate and difficult to understand. Therefore, the theory and the research questions are a two-way route in terms of research structure and function. Lewis and Pamela (1987) state that when a study is atheoretical, it has no explanatory power because it has no arguments (theory) that enables it to tell the story (interpreting data). But when the study has no research questions, not even the best theories can confine the work to guidance, focus,

relevance and impact in the area studied. The research questions are the bridges between theory, methodology, research design, data analysis and results.

How to Formulate Research Questions?

By looking at a more practical and workable view of formulating research questions, we can follow a few steps on the approach and refinement of the question:

- 1) Select a few keywords on the subject or the area in which the research will be conducted. Formulate some questions/problems on these keywords (brainstorming issues);
- 2) What is the most relevant information concerning these keywords that you want to explore? Is the theoretical basis of these keywords relevant? Delete irrelevant and/or repetitive questions (refinement of the questions);
- 3) Why these questions? Delete or rewrite questions/problems with direct answers of the type “yes” or “no,” and the false problems (rewriting problems);
- 4) When will it be possible to have these questions? (remove or rewrite the questions that are too ambitious for the allotted time);
- 5) How do you see the questions answered? (Remove or rewrite the questions that require too many financial or data collection that are impractical to the work context. For example, will you need to do interviews or administer questionnaires?);
- 6) Where will you find the information to answer the questions? (discuss the accessibility of the *corpus* of data that the research question requires).

One thing that is important in research questions is that they must be geared towards action requiring some activity on the part of the researcher. Any question that can be answered with a “yes” or “no” is not action-oriented. These questions are like a “stopper” that stagnates the research process. The following are some general tips:

1. Formulate active questions. At the beginning of the research plan you will need something that will provide direction to the other stages. To ensure active questions implies that the researcher will have to measure, observe something, or collect data under guiding criteria;
2. Do not induce an opinion in the question. Generally, people have an opinion on a particular issue. It is important to attempt to rewrite the questions that require some action on the part of the researcher to find the answer. You will note that there is a major difference in opinion and action questions;
3. Avoid questions that have an indefinite measurement scale such as “how far?”
4. Try to write questions with “what” and “why.” Avoid questions that lead to a direct response;
5. Formulate questions that relate ideas and establish forecasts, such as the conditional “if.”

As already mentioned, formulating good research questions is not something static, but dynamic. However, this dynamism must have a balance so as not to destroy the internal coherence of the research. We will cover the role of research questions in the balancing of internal coherence of the various elements and actions in research.

Questioning in Other Phases of the Qualitative Research Process

Traditionally, when questioning is envisaged, it is strongly linked to the formulation and reformulation stages of the research question. However, the question should feature as a tool in virtually all the research stages in general, and especially in qualitative research. Of course, these other questions should be secondary to, or dependent on the main research questions. We should also highlight the importance of the research questions being aligned with the objectives, the data *corpus* and the types of analysis, establishing the internal consistency of the study.

Alarcão (1990a) suggests many of these questions in a document titled “The construction of my Research Plan,” which aims to monitor the construction process of a research plan. For example, during the construction stage of the theoretical basis and literature review, this author asks:

- “What theories, models, authors will serve as a theoretical framework for my study?”
- “Am I already able to identify the three most relevant authors?”

In addition to these initial questions, the research should continue to ask other questions, even more specific, such as, for example,

- “What is the methodological and theoretical lines of authors A, B and C?”
- “Do they agree or disagree?”
- “The contexts of the investigations of these authors approximate or diverge from the context to be investigated?” etc.

It is up to the researcher to remain alert in order to formulate questions that are relevant for each study. This questioning technique is even more sensitive when conducting qualitative research, given the interpretive, holistic and open nature that these methodological approaches can take. So, questioning can always be used to correct directions and link understandings, which could otherwise cause the dispersal of the main research paths.

In the preparation of the instruments and the actual collection of data, the researcher in a qualitative study should continue to formulate guiding and systematic questions. Thus, for qualitative research, Alarcão (1990) suggests asking the questions:

- “Who are the participants?”
- “What role will they play in the study?”
- “What role will I play, as researcher?”

Once again, the researcher must specify the questions in the data collection process according to the contingencies that will surely arise. For example, if the researcher has planned to apply a particular teaching strategy in a school and did not obtain the expected reactions from the students, he/she should ask:

- “Why didn’t these students react to the strategy as reported in the literature?”
- “What were the most important differences in its application?”
- “What contexts should have been intervened?”
- “What were the factors that affected the participation of the students?”

- “What procedures can be improved in a second intervention, from the perspective of action-research?”

Of course, these general questions may be more relevant in one study and not in other research activities, and other questions may emerge to overcome the specific needs of this phase of the research.

When defending the systematic questioning throughout the qualitative research process, it is important to remember that these questions should help maintain the internal consistency with the research questions. Table 1 shows a general scheme that can be used by the researcher so you can associate issues and research sub-questions horizontally (internal consistency) with the objectives, with the research design in the creation of a data corpus, and the type of analysis that the researcher initially envisaged.

Table 1. Overall Internal Coherence of the Research

Research Questions	Research Objective	Data Corpus	Types of Analysis	Observations, Expectations & Secondary Questions
Question 1...?	Objective 1 ... Objective 2 ...	Interviews 1 & 2	Narrative analysis...	...
Question 2...?	Objective 3 ... Objective 4 ...	Notes 1, 2 and 3	Content analysis...	...

In the last column we suggest that the researcher writes the expectations, observations and the supplementary questions of the research process. This logical connection between the research questions and all the other research elements is dynamic and can be enhanced and guided using the subsidiary and guiding questions that the researcher should formulate throughout the entire process. The importance of internal coherence that has the research questions at its core is also enhanced by Maxwell (2009) in his model, which we reproduce in Figure 1.

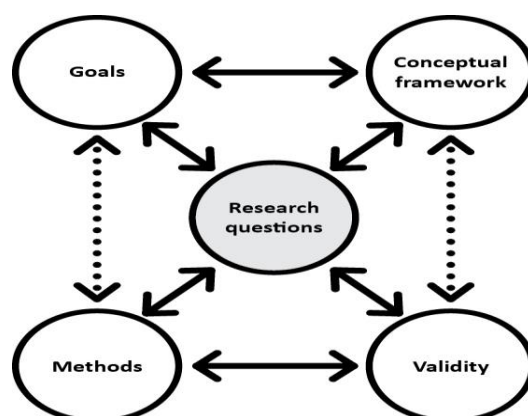


Figure 1. Maxwell's Interactive Research Design Model

This author acknowledges that although the components of this model are not substantially different from those presented in many other discussions on qualitative research projects, it introduces a new way of showing how the relationships between the components are conceptualised. In Maxwell's model (2009), the different parts of a project form an integrated whole that interact with each component linked to several others, instead of being linked in a

linear or cyclical sequence. Another important peculiarity in this model is the emphasis and centrality of research questions indicated by the solid lines in the connections (see Figure 1). Another stage where the researcher's questions are fundamental is the analysis of results, the triangulation of data and the writing of reflective discussions. In this step it is important to formulate and answer the following generic questions:

- 1) Can I draft the descriptive and interpretative encodings on these pages for my project? Am I able to make a schematic drawing?
- 2) What is(are) the unit(s) of analysis of the project?
- 3) What are the expected dimensions or sub-dimensions of analysis?
- 4) What are the means to be used to produce the categories and subcategories from the reading of the data?
- 5) Are the dimensions, categories and subcategories of analysis consistent with the research questions and objectives? Are they clear and sufficient for the encoding process of the text units?

We suggest that the researcher compiles a table (see Table 2) to systematise the questions and the answers for this analysis stage in qualitative research.

Table 2. Internal Consistency of Research Analysis

Research Questions	Analysis Dimensions	Analysis Categories	Subcategories	Observations, Expectations and Subsidiary Questions
Question 1...?
Question 2...?

How Technologies Can Support the Questioning Process

As with many areas of research, effective research is no longer conducted as it was done a few years ago. This is due to the technologies that are available today, which make it possible to perform many more and better research activities. We also recognise that there are developments in qualitative research in theoretical and applied dimensions. Although many of its fundamentals remain unchanged, the strategies for literature review, data collection, analysis and triangulation have been enhanced by various technological instruments. This is evident when one uses the enormously specialised literature databases over the internet. Even the most traditional publications have abandoned the paper mind-set and accepted the digital and its multiple possibilities. In this section, we would like to go beyond the common place and everyday examples and present technological tools that make or can make a difference when doing qualitative research. The first case is IARS, an online research management system in which, among other features, the formulation of research questions is supported. The second case is webQDA, also an online system that supports the analysis of non-numeric and unstructured data.

The Case of IARS

Both tables (1 and 2) shown above, can be best applied in the investigative journey using the IARS research process support software (Isabel Alarcão Research Software®). IARS (<http://www.ia-rs.com>) is an application that helps guiding research, and is available in an

online environment. It emerged from the supervising script of the construction of a research plan developed by Isabel Alarcão that we mentioned above. Explained by a “Virtual Advisor,” this application is based on the following principles:

- 1) It should be a conceptual organiser of the project in its various phases;
- 2) It should have the characteristics of an open matrix capable of being used regardless of the adopted methodological approaches;
- 3) It should possess a structure based on organising and stimulating questions based on the researcher’s train of thought;
- 4) It should be easy to use;
- 5) It should provide guided/directed interaction;
- 6) It should record the progress of the “guided researcher” in the form of a Research e-Portfolio;
- 7) It should act as a systematic organiser of the project and of the research results.

In Figure 2 we show an overview of a research project that was configured on IARS. There you can see the various stages developed along a research project, and you can also edit and configure it according to your needs and preferences as a researcher.

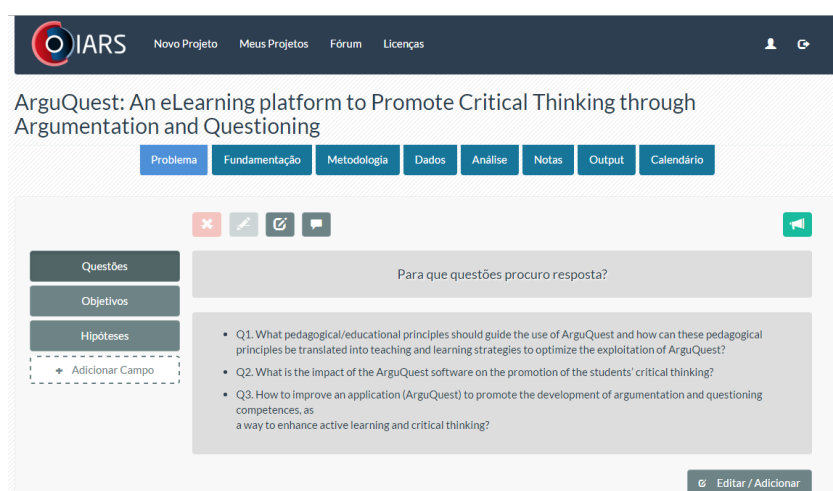


Figure 2. Overview of a project in IARS®.

One of the advantages of IARS is that it always shows the research questions and objectives at the different stages. Figure 2 shows the elements that define the research design phase of the methodology. Thus, the researcher must always remember the questions and have the ability of easily configuring the internal coherence of the other elements of his/her study and research issues. These questions are always editable and shareable with the research supervisor, in addition to the support of the virtual advisor.

The Case of webQDA

Neri de Souza, Costa, and Moreira (2010, 2011a, 2011b) refer to the act of formulating guiding questions for the search of patterns, inferences and conclusions about the data *corpus* analysed. For these authors the process of formulating questions from a data *corpus*, already coded, can be optimised using the software available in the cloud (cloud computing) called webQDA (Web Qualitative Data Analyses - www.webqda.com - <http://www.webqda.com>). In

Figure 3 we show an overview of webQDA with its three systems (Figure 4): (i) Sources - red, (ii) Coding - blue, and (iii) Questioning - green.

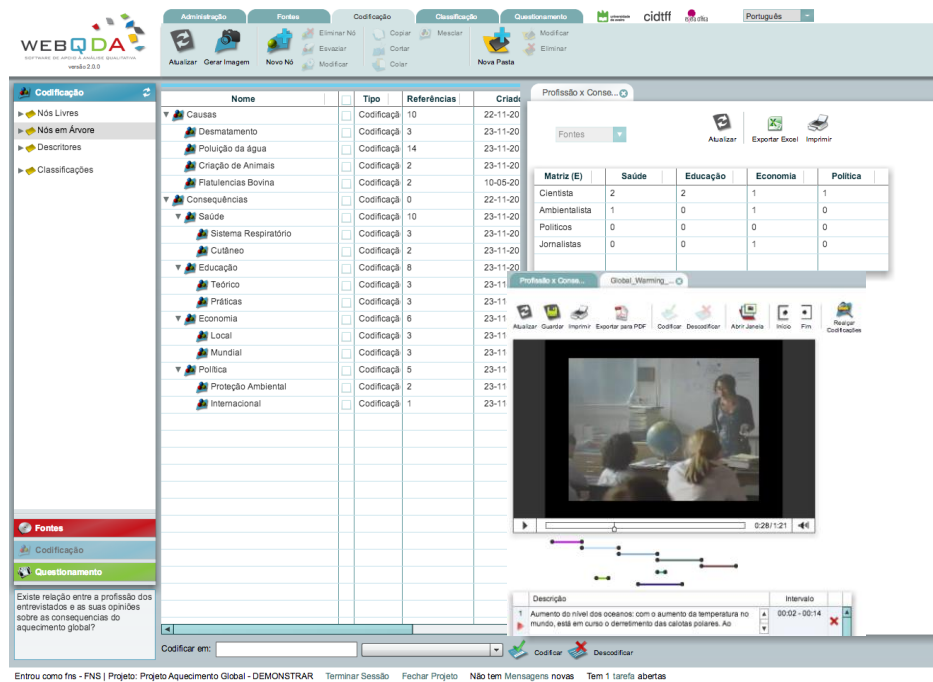


Figure 3. Overview webQDA® (www.webqda.com)

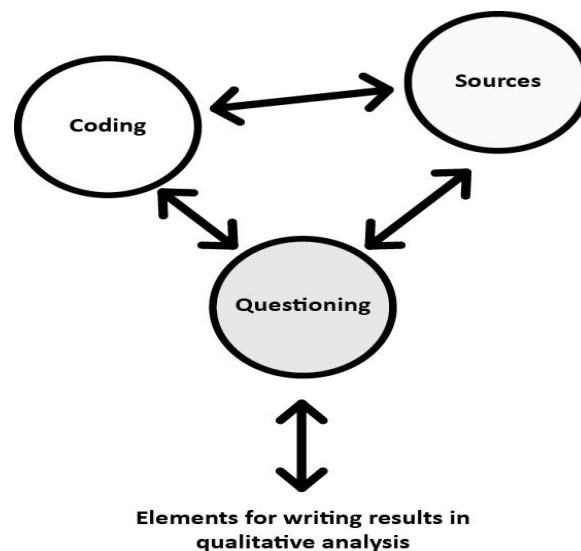


Figure 4. webQDA Systems (Neri de Souza, Costa, Neri de Souza & Moreira, 2013)

For these authors, once the data *corpus* has been encoded¹, one can formulate questions to be operationalised using tools from the “Questioning” area of the software, such as:

- 1) What is encoded simultaneously in “category 1” and in “category 2?”
- 2) What is encoded in “category 1” that is not part of “category 2?”
- 3) What is the relationship of categories 1 and 2 with my descriptive categories (Ratings and Attributes of webQDA)?

¹ To get a more complete explanation on data coding we suggest the reading of Neri de Souza et al. (2010).

The first question we will need to ask is for the intersection of data units that were coded simultaneously in categories 1 and 2 and, in the case of the third question, the intersection of several categories with the data *corpus* descriptors encoded following the webQDA processes. It is true that many of these questions are formulated implicitly by researchers, but what the authors suggest is systematic questioning, so that questions and issues are thought about explicitly. Inspired by a table from the authors we show in Table 3 examples of the data questioning that can assist the qualitative studies' researcher in the discussion of inferences, themes and patterns of information present in the *corpus* of encoded data.

Table 3. Internal consistency in the Deepening and Systematisation of the Analysis

Research Questions	Questions performed on the encoded data	webQDA tools	Range or search restrictions	Observations, inferences and/or conclusions
Do the opinions of politicians diverge from those of scientists as regards the impact (Consequence) of global warming worldwide?	What are the coded references to the two professions and in the categories and subcategories of the dimension "Consequence?"	Perform a matrix relating the "Consequence" dimension of global warming with the attribute "Profession."	Only found in the interviews of the Sources.	According to the interviews with politicians and scientists that were analysed there are no marked differences in what they say about the consequences of global warming worldwide.

In addition to these questions it is important that the researcher always bears in mind the following generic auxiliary questions:

- 1) What data analysis matrices can be built with webQDA?
- 2) What questions can be formulated to the encoded data that serve as support to the research questions?
- 3) What are the search and questioning tools available on webQDA that are really necessary for the project?
- 4) How many crossings is it possible to perform between the descriptive and interpretative encodings? And among the various interpretive encodings?
- 5) Do the answers to these questions to the data influence the research questions or theoretical framework? What inferences are sustainable within the context of the research questions?
- 6) Which of these question and answer elements can be transposed to the written text of the study?

The connection between this question and the written results seems obvious because it can:

- 1) indicate the main conclusions;
- 2) point to internal inconsistencies between the initial research questions and what is actually obtained with the analysis of data; and

- 3) contribute to the interpretive and descriptive writing style, which are unique to qualitative research. A first assessment of webQDA made by users can be found in Neri de Souza et al. (2012).

By way of conclusion, we highlight the importance of formulating the research question or questions given that it will serve as a “compass” to guide the researcher throughout the research process. To get answers, the researcher should comply with the methodological steps so as to maintain the internal coherence of the study and therefore present them in his/her conclusions.

Final Considerations

In this paper we placed emphasis on research questions in general and especially in qualitative research. Please note that researchers must always take into consideration not only what is studied but also how the study is conducted, and this is directly related to the research guiding questions. In this sense, and to be useful, an approach that is truly driven by research guiding questions must also be conducted by curiosity. Well directed curiosity, as well as other elements and tips discussed in this chapter are some of the ingredients of active questions in an efficient research process. When we do research is it to answer questions or to follow a particular method or technique? Of course, the methods and techniques are at the service of the research questions that we would like to obtain answers for, so the research questions are central to this process.

As we have seen, systematic and profound questions should lead or guide the researcher, but there are many barriers to actual questions-driven research. For White (2013) there is proof to suggest that research is often driven by method instead of questions. Another problem is that many questions that researchers formulate are restricted by the reluctance to learn new research designs or methods for collecting data and its analysis thereof. We hope that the guiding matrices and technological tools presented in this chapter can assist in broadening the horizons for new ways to conduct research, deepen the methodologies and existing techniques, seeking to respond more effectively to research questions.

References

- Alarcão, I. (1990). *A construção do meu plano de investigação*. Aveiro, Portugal: Departamento de Didáctica e Tecnologia Educativa - Universidade de Aveiro.
- Baker, D. (2002). The peer review processing science education journals. *Research in Science Education*, 32, 171–180.
- Lewis, I., & Pamela, M. (1987). *So you want to do research: A guide for teachers on how to formulate research questions*. Edinburgh, Scotland: The Scottish Council for Research in Education.
- Maxwell, J. A. (2009). Designing a qualitative study. In L. Bickman & D. J. Rog (Eds.), *The SAGE handbook of applied social research methods* (2nd ed., pp. 214–253). London, UK: SAGE Publications.
- Neri de Souza, D., Costa, A. P., & Neri de Souza, F. (2012). *Avaliação da percepção dos formandos sobre o software webQDA. II congresso internacional TIC e educação (ticEDUCA2012)*. Lisbon: ticEDUCA2012.
- Neri de Souza, F. (2006). *Perguntas na aprendizagem de química no ensino superior*. Aveiro, Portugal: Departamento de Didáctica e Tecnologia Educativa - Universidade de Aveiro.
- Neri de Souza, F., Costa, A. P., & Moreira, A. (2010). webQDA: Software de apoio à análise qualitativa. In A. Rocha (Ed.), *5ª conferência ibérica de sistemas e tecnologias de*

- informação, CISTI'2010* (pp. 1-5). Santiago de Compostela, Spain: Universidade de Santiago de Compostela.
- Neri de Souza, F., Costa, A. P., & Moreira, A. (2011a). Análise de dados qualitativos suportada pelo software webQDA. In P. Dias (Ed.), *VII international conference on ICT in education (Challenges)*. Braga: Universidade do Minho.
- Neri de Souza, F., Costa, A. P., & Moreira, A. (2011b). Questionamento no processo de análise de dados qualitativos com apoio do software WebQDA. *EDUSER Revista de Educação*, 3(1), 19–30. Retrieved from www.eduser.ipb.
- Neri de Souza, F., & Neri de Souza, D. (2011). Formular questões de investigação no contexto do corpus latente na internet. *Internet Latent Corpus Journal*, 2(1), 2–5.
- Neri de Souza, F., Costa, A. P., Neri de Souza, D., & Moreira, A. (2013). *webQDA – Manual do utilizador* (2nd ed.). Aveiro, Portugal: Universidade de Aveiro.
- Sandelowski, M. (2008). Research question. In L. M. Givens (Ed.), *The Sage encyclopedia of qualitative research methods* (pp. 787-788). Thousand Oaks, CA: SAGE Publications. Retrieved from www.sage-ereference.com/research/Article_n397.html.
- White, P. (2009). *Developing research questions: A guide for social scientists*. New York, NY: Palgrave Macmillan Ltd.
- White, P. (2013). Who's afraid of research questions? The neglect of research questions in the methods literature and a call for question-led methods teaching. *International Journal of Research & Method in Education*, 36(3), 213–227. doi:10.1080/1743727X.2013.809413.

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