ARTICLE

THE CHARACTERISTICS OF QUALITATIVE RESEARCH: A STUDY WITH TESIS FROM A POSTGRADUATE PROGRAM IN EDUCATION

DANIELE CARIOLANO DA SILVA¹
ORCID: https://orcid.org/0000-0001-7112-8552

FRANCISCO RANULFO FREITAS MARTINS JÚNIOR²
ORCID: https://orcid.org/0000-0003-1031-8066

TATIANA MARIA RIBEIRO SILVA³
ORCID: https://orcid.org/0000-0002-6308-3670

JOÃO BATISTA CARVALHO NUNES⁴
ORCID: https://orcid.org/0000-0002-1270-0026

ABSTRACT: The mode of production of scientific knowledge has become complex, leading to the use of research methodological elements that also investigate subjective issues. This study aims to analyze characteristics of PhD theses that adopted the qualitative approach, defended at a Postgraduate Program in Education (PPGE) of a University of the Northeast Region of Brazil, 2013-2016 quadrennium. The theoretical basis of the work is based on contributions from Evandro Ghedin, Marcos Zanette, Marli André and Maria Amélia Franco. To achieve the proposed objective, a quali-quantitative documentary research was developed, based on the identification and analysis of the categories: theme, method, data collection procedure and data analysis technique, synthesized by grouping data extracted from theses abstracts. It was found that, of the amount of 57 theses defended in the period considered, 87.7% (n=50) used a qualitative approach, although only 32.0% (n=16) of these explain this approach in their summary. Public policy and teacher education are the most present among themes. 42.0% (n=21) of the theses clearly indicate the research method, with emphasis on documentary research. There are multiple data collection procedures in them, especially interview and document collection. In 46.0% (n=23) of the theses, the data analysis technique is specified, mainly content analysis. However, it is considered important that researchers in the field of Education clearly inform all the methodological elements of their theses in their abstracts.

Keywords: Qualitative approach, documentary research, PhD thesis

¹ Universidade Estadual do Ceará (UECE). Fortaleza, CE, Brasil. <dannicariolano@yahoo.com.br>
² Universidade Estadual do Ceará (UECE). Fortaleza, CE, Brasil. <ranulfo.freitas@uece.br>
³ Universidade Estadual do Ceará (UECE). Fortaleza, CE, Brasil. <tatiana.ribeiro@uece.br>
⁴ Universidade Estadual do Ceará (UECE). Fortaleza, CE, Brasil. <joao.nunes@uece.br>
CARACTERÍSTICAS DE PESQUISAS QUALITATIVAS: ESTUDO EM TESES DE UM PROGRAMA DE PÓS-GRADUAÇÃO EM EDUCAÇÃO

RESUMO: O modo de produção de conhecimento científico tornou-se complexo, induzindo o uso de elementos metodológicos de pesquisa que deem conta de investigar, também, problemáticas de cunho subjetivo. Baseado nessa premissa, este estudo objetiva analisar características de teses de doutorado que adotaram a abordagem qualitativa, defendidas em um Programa de Pós-Graduação em Educação de uma Universidade da Região Nordeste do Brasil, no quadriênio 2013-2016. A base teórica do trabalho está assentada em contribuições de Evandro Ghedin, Marcos Zanette, Marli André e Maria Amélia Franco. Para atingir o objetivo proposto, foi desenvolvida uma pesquisa documental, do tipo quali-quantitativa, pautada na identificação e análise das categorias: temática, método, procedimento de coleta de dados e técnica de análise de dados, sintetizadas pelo agrupamento de dados extraídos dos resumos das teses. Constatou-se que, do montante de 57 teses defendidas no período considerado, 87,7% (n=50) utilizaram abordagem qualitativa, embora somente 32,0% (n=16) destas explicitam tal abordagem em seu resumo. Política pública e formação de professores são as temáticas mais presentes entre elas. 42,0% (n=21) das teses informam claramente o método de pesquisa, com destaque para a pesquisa documental. Há múltiplos procedimentos de coleta de dados nelas, sobretudo entrevista e recolha de documentos. Em 46,0% (n=23) delas, consta-se a especificação da técnica de análise de dados. Entretanto, considera-se importante que os pesquisadores da área da Educação comuniquem claramente todos os elementos metodológicos de suas teses nos respectivos resumos.

Palavras-chave: Abordagem qualitativa, pesquisa documental, tese de doutoramento

CARACTERÍSTICAS DE LA INVESTIGACIÓN CUALITATIVA: ESTUDIO EN TESIS DE UN PROGRAMA DE POSTGRADO EN EDUCACIÓN

RESUMEN: La forma de producir el conocimiento científico se ha vuelto compleja, induciendo el uso de elementos metodológicos de investigación que también investigan problemas subjetivos. Partiendo de esta premisa, el presente estudio tiene por objeto analizar las características de las tesis doctorales que adoptaron el enfoque cualitativo, defendido en un Programa de Postgrado en Educación (PPGE) de una Universidad de la Región Nordeste del Brasil, en el cuatrienio 2013-2016. La base teórica del trabajo se apoya en las contribuciones de Evandro Ghe din, Marcos Zanette, Marli André y Maria Amélia Franco. Para lograr el objetivo propuesto, se desarrolló un tipo de investigación documental de tipo cualitativo-quantitativo, basado en la identificación y el análisis de las categorías: tema, método, procedimiento de recopilación de datos y técnica de análisis de datos, sintetizada mediante la agrupación de datos extraídos de los resúmenes de tesis. Se observó que de la cantidad de 57 tesis defendidas en el período considerado, el 87,7% (n=50) utilizó un enfoque cualitativo, aunque sólo el 32,0% (n=16) de ellas explican dicho enfoque en su resumen. Las políticas públicas y la formación de profesores son los temas más presentes entre ellos. El 42,0% (n=21) de las tesis informa claramente el método de investigación, con énfasis en la investigación documental. Existen múltiples procedimientos de recopilación de datos en ellos, especialmente la entrevista y la recopilación de documentos. En el 46,0% (n=23) de ellos, se especifica la técnica de análisis de datos, en particular el análisis de contenido. Sin embargo, se considera importante que los investigadores en la esfera de la educación comuniquen claramente todos los elementos metodológicos de sus tesis en sus resúmenes.

Palabras clave: Enfoque cualitativo, investigación documental, tesis doctoral
INTRODUCTION

It is imperative that research procedures anchored in a viable and appropriate way of producing knowledge are considered, as well as paying attention to the research ethical procedures and the research context explored by the researcher. Seen from this angle, Medeiros, Varela and Nunes (2017, p. 177) argue that the qualitative research approach is "[...] flexible, but does not mean an absence of methodological rigour". This demonstrates the complexity that exists when investigating the social, given that it is necessary to know how to adapt to the context and extract relevant analysis.

There are several qualitative studies produced within different areas of knowledge, times and spaces, configuring an important inventory published and available to theoretical deepening. The area of Education is not sidelined from the investigation process through qualitative research, as numerous phenomena of diverse, dynamic and complex nature are derived from it.

Considering these conjectures, this study aims to analyse characteristics of doctoral theses that adopted the qualitative approach, developed in a Postgraduate Programme in Education (PPGE) of a University in the Northeast Region of Brazil, in the quadrennium 2013-2016.

Therefore, it was developed a documental research (GIL, 2002), of quali-qualitative category (SOUZA; KERBAUY, 2017). By adopting the criteria of use of the qualitative approach in theses, data derived from the abstracts referring to the constituent parts of this kind of academic work (theme, method, data collection procedure, data analysis technique) were extracted, organized and analyzed. These parts are fundamental to any kind of academic study. According to Gil (2002), they must clarify, in detail, the process of research on the basis of its stages, procedures adopted and resources allocated to attain the proposed objectives.

Subsequently, it is brought concepts about qualitative approach in education research, contemplating the characterization and contextualization of the postgraduate program from which the analyzed theses originated. It is also presented the methodology of this research, with its data collection and analysis procedures, as well as the results and discussions, exposing the findings in relation to the criterion in evidence, within the investigated PPGE. Finally, the final considerations are presented, summarizing the results and indicating possibilities for the use of the educational research of subjective nature.

THE QUALITATIVE APPROACH IN THE EDUCATIONAL RESEARCH

The educational phenomena (teaching, learning, teacher education, evaluation, etc.) entail in themselves subjective problematizations that can be perceived by attentive gazes. Considering this assumption, Rodrigues (2016) argues that the qualitative approach arose from the comprehension of research as an open path, made and remade during the investigative journey. The referred author is based on Ghedin and Franco (2011) and states that such an approach departs from the assumptions of positivist philosophy, which sustains the traditional perspective of the science in modernity, perceived as a superior entity, endowed with metaphysical characteristics such as neutrality and impartiality.

The exacerbated scientific positivism stifles the researcher's criticality and creativity while carrying out the research, weakening the accumulation of knowledge based on the quality of the surveyed facts. Indeed, the reality investigated in a positivist perspective seeks to be separated from the human gaze and sensitivity. Because of this reason, Roman, Marchi and Erdmann (2013) state that the qualitative research was necessary amidst the epistemological, methodological, political and ethical criticism of social scientific research in fields that made use of experimental, correlational and survey research strategies.

Qualitative research aims to understand the multiplicity of meanings and senses that mark the subjectivities of the subjects in their relationship with the social. It considers that the broad dimension and the complex nature of the object of study cannot be comprehended in the light of technopositivist rationality, which usually stops coldly at the external reality of the facts (RODRIGUES, 2016), because

[...] It is not allowed to take distance in relation to its object, as required by the method of the Natural Sciences. The objectivity, the neutrality and the detachment of the subject in relation to his object, pretension of the Natural Sciences, becomes alienation if applied in the study of
human phenomena. The distancing would not allow knowing the object in all its richness, in its historical context. (GHEDIN, 2004, p. 8).

On the basis of qualitative research precepts, social issues of contemporaneity came to be understood by different perspectives not restricted to the description of reality by quantification techniques. In this regard, according to André (2001), as of the 1980's, especially in Brazil, the researches presented a change in approach, driven by the researcher's differentiated perception about the social phenomena. The author also highlights the rise of the recognition of subjectivity in the research process:

Whereas in the 1960s and 1970s the interest was located in controlled experimental situations of the laboratory type, in the 1980s and 1990s it was the examination of "real" situations of everyday life in the school and classroom that became one of the main concerns of the researcher. If the role of the researcher was above all that of an "outsider", in the last ten years there has been a great appreciation of the "inside" look, leading to the appearance of many works in which the researcher's own experience is analysed, or in which he carries out the research with the collaboration of the participants. (ANDRÉ, 2001, p. 54).

This historical movement of qualitative research in the context of Brazilian education, in pursuit of credibility and guarantee of accuracy, has followed alternative theoretical and methodological paths. It revealed itself aware of the complexity of educational phenomena as an eminently human practice, which can reflect on the production of knowledge based on multiple and variable external and internal influences of the focused reality itself.

In Brazil, the amount of Postgraduate Programs in Education (PPGEs) has grown significantly since the last century (GONDRA; NUNES; MARTINS, 2018). Regarding the current century, it is possible to observe, in Chart 1, an increase of 135.9% in the number of these programs from 2006 (Triennal 2007) to April/2019, in accordance with data provided by the Coordination for the Improvement of Higher Level Personnel (CAPES, 2019). This expansion was intensified in the last years of the period, through supply of courses in different modalities (academic and professional) by public higher education institutions, mainly.

**Chart 1 - Postgraduate Programs in Education in Brazil, 2006 (Triennal 2007) to April/2019**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triennal 2007</td>
<td>78</td>
</tr>
<tr>
<td>Triennal 2010</td>
<td>94</td>
</tr>
<tr>
<td>Triennal 2013</td>
<td>121</td>
</tr>
<tr>
<td>Quadriennal 2017</td>
<td>172</td>
</tr>
<tr>
<td>April 2019</td>
<td>184</td>
</tr>
</tbody>
</table>

Source: CAPES (2019, p. 4).

By April 2019, the area of Education had 270 postgraduate courses, organised into 184 Programs, of which 48 offered only academic masters, 88 offered academic masters and doctorates, 47 had only professional masters and one offered both professional master’s and doctorate (CAPES, 2019).

The expansion of the number of PPGEs occurred in all five regions of Brazil, following the growth of Brazilian Post-Graduation in the different areas of knowledge (CAPES, 2019; GONDRA; NUNES; MARTINS, 2018). In the Northeast, where the Program that is the object of this research is
located, the number of Postgraduate Programs in Education has more than tripled in this time interval: from 11 in 2006 (last year of the 2007 Triennial, referring to the period 2004-2006), it jumped to 34 in April/2019 (CAPES, 2019). This growth in the amount of PPGEs impacts on the increase of educational research with academic and social relevance carried out in the country and, particularly in the Northeast Region, favoring, moreover, the doctoral degree in the area.

Due to the complexity pertaining to specific phenomena such as education, it is essential that these are also investigated by qualitative research approach, which focuses on various meanings, motives, aspirations, beliefs, moral values and emerging attitudes. This kind of research is consolidated in data and subjective aspects, expressed through speeches, experiences, life stories, actions, perceptions, interests, emotions, etc. According to Bogdan and Biklen (1994), the concern with the analysis of qualitative data occurs both with the process that generated them, as by the results achieved, caring for the meaning of what was analyzed and discussed. Thus, the qualitative research in education may lead to

[... contributions to the advancement of knowledge in the dynamics of the educational process and in its structure as a whole: it reconfigures the understanding of learning, of the internal and external relations in the institutional instances, of the historical-cultural understanding of the demands of a more dignified education for all and of the comprehension of the importance of the school institution in the humanization process. (ZANETTE, 2017, p. 159).

In education, the reflections on the assumptions of traditional science become more relevant when highlighting the need to conceive the scientific knowledge based on the dialectics between subject and object. Rodrigues (2016) argues that, in the exercise of doing educational research, there is impregnation and imbrication between researcher, object and researched subject, who have sociocultural attributes permeating their life stories and social environments. This new way of perceiving, understanding and apprehending scientific knowledge drives new methodologies capable of launching more attentive, sensitive and creative looks about contemporary educational issues.

In pursuit of investigating and unveiling a reality through qualitative research, the researcher in Education maintains constant and permanent interaction with his object of study, aiming, sometimes, to obtain answers to the given educational problematic. This sort of interaction makes it possible to obtain understanding and comprehension of the reality put in evidence.

It is emphasized that the choice for this approach is related to the nature of the investigation undertaken, the outlined objectives, the contexts to be explored and the specific subjects. For Medeiros, Varela and Nunes (2017, p. 181), the qualitative research in the Humanities and Social Sciences requires 

"[...] individual experiences, which demands, in the research process, sensitivity for the local situations". Furthermore, the cited authors clarify that the researcher 

"[...] tends to describe the phenomena, with richness of details and how they are situated and embedded in their contexts" (p. 182). With the choice of qualitative approach to foster research, it is sought, at times, the immersion in the world of the subjects, unveiling contexts and meanings in the constitution of new senses.

Given this scenario of growth of Postgraduate Education in the Northeast and the adoption of the qualitative approach in research in the area, the next section brings the characterization of the Program selected for this study.

CHARACTERIZATION OF THE PPGE

In accordance with information contained in the Program's website, it was created in the 1970s, currently offering academic master's and doctorate courses in the Northeast Region of Brazil. The scope of the Program is the investigation of the Brazilian educational reality, so that, based on studies and researches, it can be developed to improve its quality, especially in schools and other spaces that provide educational moments.

To provide the formation of high-level academic staff is the main objective of the PPGE, made possible by the integration between teaching, research and guidance, prospecting the re-signification of education and, consequently, of the Brazilian society.

In the Programme, by the year 2020, 933 master's dissertations and 288 doctoral theses had already been defended, mainly in 2009 and 2013. These products involve diverse and pertinent issues to
various fields of education. Since the doctoral course was offered in 2002, the first theses date back to 2006. Graph 2 exposes, by 2020, their percentage distribution \((n=288)\) in 16 thematic categories, 15 of which are unique and one is composite (Other) that gathers other seven of lower frequency.

![Chart 2 - Thesis themes defended in the PPGE, 2006-2020](image)

The thematic observed denote the multiple facets of the objects of investigation that contemplate different educational modalities. The most frequent themes are: human formation \((16.0\%; \ n=46)\); basic education \((10.4\%; \ n=30)\); teaching practice \((10.0\%; \ n=29)\); and public policy \((9.0\%; \ n=26)\). The Other category \((9.3\%)\) is constituted by the following themes little researched in the Program: learning, inclusive education and youth and adult education \((1.7\%; \ n=5, \ each)\); field education \((1.4\%; \ n=4)\); distance learning and information and communication digital technologies \((1.0\%; \ n=3, \ each)\); and teacher socioemotional condition \((0.7\%; \ n=2)\).

In addition to master's and doctoral courses, the PPGE offers other activities such as post-doctoral internship, which has more than 20 ongoing/completed researches, and exchange for doctors in the modality of sandwich doctorate. The Program, under the institutional triad of teaching, research and extension, proposes to offer academic, professional and critical training and the democratization of education. Other information related to the Program, which made this study possible, were analytically treated and are exposed below.
METHODOLOGY

This research is of the quali-quantitative approach (mixed). It identified, based on the complementarity between quantity and quality in educational studies (SOUZA; KERBAUY, 2017), the use of the qualitative approach in educational research expressed in doctoral theses, defended in a PPGE of the Northeast Region of Brazil, in the years 2013 to 2016.

The quantitative aspect of the study is justified by its advantages, highlighted by Johnson and Onwuegbuzie (2004), in: 1) useful for obtaining data that allow quantitative inferences about the object of study; 2) fast data collection and analysis processes, including with the use of software; 3) provision of data that quantify and can scale the reality investigated; 4) research results are obtained, in general, independent of the researcher; 5) can be applied to a large number of subjects and/or objects. The quantitative data referring to the categories theme, method, data collection procedure and data analysis technique were analyzed with the aid of descriptive statistics, considering the frequency of each of these elements in the abstracts.

The qualitative aspect of the study is justified by the necessity of comprehending educational phenomena imperceptible using only quantitative techniques of analysis. By this logic, more than producing inferences about the data, it is possible to unveil epistemic meanings embedded in them (JOHNSON; ONWUEGBUZIE, 2004). The qualitative data referring to the aforementioned categories were understood as textual clippings of the abstracts, being compared among themselves and then analyzed based on the thematic analysis proposed by Bardin (2010).

The documentary research method was used to answer the research objective. According to Gil (2002), this method is characterized by searches in primary sources, which have not yet received analytical treatment in relation to a research theme. The abstracts of the doctoral theses in the PPGE were considered documents submitted to the analysis (GARCIA; YASUDA; BENE, 2020).

The choice of the abstract as an object of analysis is justified by its constitution and purpose in an academic-scientific text. In this regard, Rule 6028 of the Associação Brasileira de Normas Técnicas [Brazilian Association of Technical Standards] (ABNT, 2021) and Pereira (2013) support the use of the abstract as a source to capture reliable data of a research, even if it is not able to present all the information available in the rest of the text in which it is inserted.

The Rule 6028 establishes that the abstract of a scientific text succinctly presents the central points of the document to which it refers. For Pereira (2013, p. 707-708), the preparation of high quality abstracts is a meticulous process, which requires specific procedure: "[...] make it self-explanatory. [...] Make sure that there is no conflict of information between the abstract and the article. [...] Make sure that the objective and conclusion match. [...] Include keywords (or descriptors) that identify the article”.

The time frame 2013-2016 was defined because it is equal to the period of the quadrennial evaluation of CAPES, which resulted in the Evaluation Report 2013-2016 Quadrennial 2017 (CAPES, 2017). The PPGE chosen is one of the seven programs in the area of Education, located in the Northeast Region of the country, evaluated with grade 5 by CAPES. In the Northeast, there are still no programs in this area with grades 6 or 7.

Since the criteria for this research have been presented, it is important to highlight that the analysis of each summary constituted a constant movement of data interpretation, going beyond what was described. It enabled the comprehension of the apprehended data and the expansion of knowledge around the researched theme (MINAYO et al., 1994).

It was sought to perform the analysis based on the official documents (theses) available for public access in the digital repository of the Institution, preserving both the identity of the PPGE and of the authors of the doctoral research subjects. As it comprises public access information, the study is exempted from registration in the CEP/CONEP System (Comitê de Ética em Pesquisa/Comissão Nacional de Ética em Pesquisa [Research Ethics Committee/National Research Ethics Commission]), as established by Resolution Nº. 510/2016 (BRASIL, 2016).

The next topic presents the results obtained with the analysis of the characteristics of the theses, based on the year of defense and the four categories defined.
RESULTS AND DISCUSSIONS

A survey of the theses defended in the PPGE in the period 2013-2016 was carried out, generating an amount of 57, distributed as follows: seven in 2013, 14 in 2014, 19 in 2015 and 17 in 2016, corresponding to 19.8% of the total of 288 theses defended in 15 years of offering the academic doctoral course by the Program (2006-2020). In the analysis, it was not identified thesis whose research approach was exclusively quantitative. Percentage of 12.3% (n=7) of the selected theses were classified as research with mixed approach (qualitative and quantitative). The remaining (87.7%; n=50) adopted the qualitative approach, showing, as in other empirical (LEITE; SILVA; MARTINS, 2017; LEITE et al., 2021; MEDEIROS; VARELA; NUNES, 2017) and theoretical studies (ANDRÉ, 2001; GHEDIN; FRANCO, 2011; ZANETTE, 2017), the adherence by this approach in the area of Education.

The evolution of the quantity of theses of the PPGE, in the period under examination, allows us to identify a growth of 142.9%. This significant increase is related to the expansion of the stricto sensu postgraduate studies in Education in Brazil, especially at the doctoral level, including in the Northeast Region (CAPES, 2019). By considering only those whose approach is qualitative, there was an increase of 325.0%, as can be seen in Chart 3. This is a significant growth, especially when compared to the previous four-year period (2009-2012), when there was a 23.5% drop in the number of qualitative research among the 65 defended theses.

It is worth noting that not all theses of interest explicitly mention the use of the qualitative approach in their abstract, that is, they describe in the text some expression that refers to this, such as qualitative research, qualitative approach, etc. This made it difficult to establish the relationship between object of study and methodological procedures employed, considering only the abstract as a source of information of an investigation of a qualitative nature.

This is mediated by the researcher, who gets closer and closer to the subjective reality focused on in the proportion in which it deepens in its investigation. In this sense, the approximation between problematic, means of solving it and researcher elucidates the knowledge of a given object of study in all its richness (GUEDIN, 2004), considering its historical, social and cultural delineation built by the collaboration of other subjects (ANDRÉ, 2001). For Zanete (2017), the reciprocal contact between the researcher and the research context has a strong influence on how the investigation is conducted, favoring the delineation of the object of study.

Bearing in mind these specificities of the theses, a quantitative of 50 made use of the qualitative approach, and these are analyzed hereafter. Among the selected theses, only 32.0% (n=16) explicit the use of this approach in the abstract. In 68.0% (n=34) of them, it is possible to deduce such approach, either by the data collection procedure, data analysis techniques or verb constituent of the general objective of the work, because these refer to the treatment of qualitative data in research.

Despite the existence of these gaps between the abstracts of most theses, which do not outline the methodology in its entirety, their reading and analysis served to categorize the data of this research in relation to theme, method, data collection procedure and data analysis technique. Regarding the presence of these categories, 30.0% (n=15) of the theses informed all of them in the abstracts, while 70.0% (n=35)
did not identify some of them. Of the theses that did not indicate the four categories, 42.0% (n=21) enunciate three; 22.0% (n=11), two; and 6.0% (n=3), only one.

As shown in Chart 4, among the themes addressed in the theses, "Other" is the most frequent (20.0%; n=10), representing a set of themes whose frequency is less than three and that associate education with another area of knowledge, such as, for example, Sociology. Next, there are themes on public policy (16.0%; n=8), teacher education (14.0%; n=7) and social representations and human formation (12.0%; n=6, each). The less observed themes among the theses were: teaching practice and teacher professionalization (10.0%; n=5, each), besides literacy (6.0%; n=3).

**Chart 4 - Themes of the theses defended with a qualitative approach in the PPGE, 2013-2016**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>10</td>
<td>20.0%</td>
</tr>
<tr>
<td>Public policy</td>
<td>8</td>
<td>16.0%</td>
</tr>
<tr>
<td>Teacher education</td>
<td>7</td>
<td>14.0%</td>
</tr>
<tr>
<td>Social representations</td>
<td>6</td>
<td>12.0%</td>
</tr>
<tr>
<td>Human formation</td>
<td>6</td>
<td>12.0%</td>
</tr>
<tr>
<td>Teaching practice</td>
<td>5</td>
<td>10.0%</td>
</tr>
<tr>
<td>Teacher professionalization</td>
<td>5</td>
<td>10.0%</td>
</tr>
<tr>
<td>Literacy</td>
<td>3</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

Source: Elaborated by the authors.

There is prevalence of pre-service education and teacher’s work among the abstracts of the theses that had public policy and/or teacher education as a theme, with emphasis on training paths guided by curricula with specific content of the degree, such as aesthetics, culture, inclusive education, textbook and supervised internship. The discussion held in the theses on pre-service education showed the need for undergraduate courses to carry out, in a practical way, training activities based on teaching in basic education, in training models that meet the minimum requirement for teacher education, either by curricular demands emanating from the Law of Directives and Bases of National Education (Lei de Diretrizes e Bases da Educação Nacional-LDBEN No. 9.394/96), or by educational actions that meet the training needs of teachers, as argued by Mello (2000).

Gatti (2014) endorses the exposed asserting to be necessary attention to the current demands of pre-service teacher education in Brazil, overcoming deadlocks in this field, such as the establishment of a public policy of national spectrum for the undergraduate degrees, the curricular defragmentation and a project of monitoring the supervised internship inherent to these courses.

Regarding the research methods used in the theses, six types of these were identified, presented in Chart 5. Most of the theses (58.0%; n=29) do not present the research method in the abstract, in disagreement with what is stipulated by Rule 6028 (ABNT, 2021) and Pereira (2013). In solving problems of this type, Ghedin and Franco (2011) discuss in detail about the investigative principles intrinsic to the method of knowledge production in education, a fact that induces the appropriate use of educational theories that support methodological elements of research.
Among the theses that explicitly state the research method in the abstract (42.0%; n=21), there is a predominance of the use of documentary research (14.0%; n=7), ethnography and case study (8.0%; n=4, each). The data indicates that most researchers did not take due care to clarify the research method guiding their investigation. However, in general, they sought to situate the research method around the procedures of data collection and analysis adopted, based on primary sources of data coming from the Public Power, at the Federal, State and Municipal levels. Such sources are constituted, above all, in texts referring to educational public policies of the curricular and program type.

The most evident method among the theses was the documentary research, which can be an effective practice in the elucidation of educational phenomena, since the document can be a source of information about the investigated context, as well as support statements and claims of the researcher (LUDKE; ANDRÉ, 1986). The delineation of the investigated context may be directed by the case study, since it is a method of empirical investigation about a contemporary phenomenon within a real-life context, especially when the boundaries between the phenomenon and the context are not clearly defined (YIN, 2010).

As a complement to the research method that is supported by documental sources (documentary research), ethnography and case study constituted procedures used in the assumptions about the alignment of pedagogical/teaching practices with curricular guidelines, educational policies of inclusion and the development of professionalism of teachers in training.

About the data collection procedures, 32.0% (n=16) of the theses made use of only one procedure. The distribution of the quantity of procedures used by the remaining theses is: two (22.0%; n=11), three (32.0%; n=16) and four (14.0%; n=7). Chart 6 exposes the frequencies of use of these procedures among the theses, which mostly adopted the combined use of means for data extraction, such as combinations between document and interview, as well as observation and questionnaire.
Chart 6 - Data collection procedures of the theses defended with a qualitative approach in the PPGE, 2013-2016

The interview is the most used data collection procedure among the theses (76.0%; n=38); followed by the collection of documents (58.0%; n=29) and the observation (38.0%; n=19). The questionnaire is present in 20.0% (n=10) of them, followed by the "Other" category (18.0%; n=9), endowed with procedures whose frequency is equal to or less than two, such as the focus group and life narrative. The least used are: test of free association of words (TALP) (10.0%; n=5) and the use of the books (8.0%; n=4).

Due to the complexity of the object of study, it was noticed that most of the theses (68.0%; n=34) chose to use more than one procedure for data collection. The collection and analysis, carried out based on a particular procedure, were used as criteria for execution of further stages of the research based on other techniques, such as, for example, the application of a questionnaire for selection of subjects, who subsequently granted interviews.

It was possible to identify, among the theses, the use of interviews as devices for the building of data and ideas useful to qualitative research, by the ability to freely express the thoughts of the participants. For example, the semi-structured interview was used to understand how different subjects engage with inclusive education policies, as well as the implementation of education system, the process of professional constitution and various types of learning. According to Lüdke and André (1986, p. 34), "[...] the advantage of the interview over other techniques is that it allows us the immediate and current capture of the desired information, practically with any type of informant and on the most varied topics".

Indeed, the interview may be an ideal device for capturing meanings related to a particular object of investigation and present in a discourse situated in a singular context. Considering this possibility in educational research, Guedin and Franco (2011, p. 159) state that:

The comprehension of meaning occurs in context; in fact, every discourse that wants to express and expresses some particular object or the real as a whole is always situated in a determined and historically conditioned context. Because of this, the understanding is dialogical and active as it is a form of expression and knowledge of this historically situated reality. Every form of discourse constitutes a mode of insertion in a specific context.

As the second most employed procedure, the collection of documents proved to be an important resource for the extraction of data required for research. Attentive to the use of this type of resource, Gil (2002) understands that a document can assist in the characterization of a phenomenon.
related to something, such as an institution or a person, because it can allow its detailed description based on evidence recorded in a text of official nature.

The observation was presented in the theses as a procedure used by the researcher to seek clues of information about the object of investigation outlined in the methodology of his research. In a practical way, the doctoral researches that used the observation technique had the intention of performing a movement to perceive if the speech of the subject/teacher, about his/her own praxis, matches or not what is performed by him/her while performing the regency of classes. Therefore, it was observed if he/she makes significant interventions that provide conditions for the learning of students from the levels of basic and higher education.

About the qualified use of observation as a data collection procedure, Farias et al. (2010) do not point it out as an innocent or passive contemplation, because it requires active and inquiring look of the researcher, an open disposition to unveil between the lines and nuances of the observed reality, what is revealed and hidden in the concern of the problematic.

Among the theses that used the questionnaire to collect data, the predominant process was the identification of some types of research subject profiles (personal, professional, etc.), as well as the selection of some of these subjects to carry out other methodological steps, such as granting interviews to understand issues related to the object of study. It was perceived that the answers to the questionnaire became data that generated standardization, comparisons, generalizations and precisely quantifiable information. These procedures using the questionnaire are advocated by Gil (2002), who expresses the possibility of this instrument covering a large number of participating subjects, ensuring both their anonymity and lower research costs.

Considering the explicit description of the data analysis technique in the abstract, 54.0% (n=27) of the theses do not meet this criterion, while 46.0% (n=23) ensured that this information was present, as expressed in Chart 7.

**Chart 7 - Data analysis techniques of the theses with qualitative approach in the PPGE, 2013-2016**

Source: Elaborated by the authors.

Detailed how research data were collected and analyzed are processes that confer scientific rigor to the research work. After all, it is not possible to dissociate the results of a research from the processes that generated them (BOGDAN; BIKLEN, 1994). Due to the specificities of the objects of studies present in the theses, data analysis techniques become more complex. They (objects) tend to be investigated by procedures that complement each other (SOUZA; KERBAUY, 2017) and, during the analyses that aim to answer problems of educational nature, "[...] it becomes necessary to resort to different approaches among multiple disciplines and theoretical fields" (ZANETTE, 2017, p. 158). However, the lack of clarity of the data analysis technique at the beginning of the final report of a research makes it difficult to understand about this step of the work (ABNT, 2021; PEREIRA, 2013), a fact found...
in most theses. Among the techniques identified, content analysis was the most used (30.0%; n=15), followed by the Foucaultian discourse theory (10.0%; n=5) and discourse analysis (6.0%; n=3).

The comprehension of human language is the mainspring of the data analysis of the qualitative researches developed in the PPGE, either by the content or discourse present in texts of diversified authorship and that present as raw material the speech of distinct interlocutors.

The content analysis technique was used to analyze messages contained in components of public policies such as legislation, guidelines and standards, as well as those that express the context of teaching and pedagogical practices, teacher education and teacher professionalism. With the purpose of understanding contents present in textual reports, the content analysis subsidizes the reading and interpretation of messages from different classes of documents, revealing aspects of social life (OLABUENAGA; URIBARRI, 1989).

As well as content analysis, discourse analysis was employed in the theses to unveil implications of the implementation of educational public policies and the teaching professionalism, besides having supported discursive voices relating to specific topics, such as human formation in educational context. Pêcheux (1993) clarifies that the distinction between content analysis and discourse analysis and, consequently, the choice of one instead of the other, is given by the mode of access to the object, since the second works with the meaning and not with the content, focusing on the empirical materiality of the text.

The theses that used the Foucaultian discourse theory carried out analysis of statements arising from discourses evoked by various sources of origin, such as in Parliament, in literacy campaigns, in the reflective field of Pedagogy and in informal learning environments. It was noted that the meaning of these statements was made possible by the empirical meaning of the words and their respective relations with the things and the world, constituted in a complex and historical way, being the speech understood beyond the content represented by signs. This process is expressed in practices of construction of implications, of objects of whom one speaks and of subjectivities, since the subjectivity of the subject is fostered in (by) the discourse (FISCHER, 2001).

Given the scenario exposed, it is possible to say that, part of the doctoral degree (thesis) developed in PPGE investigated makes explicit the multiple facets of doing research in education in a subjective way, a situation that will be treated next.

**FINAL CONSIDERATIONS**

Complying with situational, contextual and scientific demands of investigation, the qualitative research approach enables appropriation and variety of methods, techniques, diverse perspectives of the participating subjects, reflexivity of the researcher, development of concepts sensitive to the investigated scenario and description of multiple realities. This approach is not presented as a rigidly structured proposal, allowing imagination and creativity in the proposition of works that explore varied approaches. Hence, it is believed that the theses analyzed represent the multifaceted nature of the qualitative approach, innovating and contributing to research in the field of education.

Only 30.0% (n=15) of the 50 theses identified with qualitative approach indicated in their abstracts the four categories investigated in this research - theme, method, data collection procedure and data analysis technique. These categories constitute necessary information for the characterization of a research with scientific bias.

Without the proper description of the fundamental constituents of educational research, in general, and qualitative research, specifically, its scientific and methodological rigor is at the mercy of criticism that can point weaknesses in the knowledge produced by this type of research. Therefore, it is up to the researcher to explain, right at the beginning of his manuscript, the characteristics that make his work reliable, thus supporting his findings.

In the quadrennium 2013-2016, there was a significant growth of 325.0% in qualitative approach researches in the investigated PPGE, especially when compared to the previous quandriennium (2009-2012), when there was a decrease of 23.5% in the number of qualitative studies among the 65 defended theses. By considering the time frame of this research, it is possible to highlight, among the
abstracts of the theses that explicit the analyzed categories: public policy and teacher education themes; documentary research method; interview and document collection as data collection procedures; and content analysis technique.

The advancement of knowledge driven by qualitative research is unveiled in a diverse way in Brazilian postgraduate studies, by the conceptual framework to approach reality, by the diversified research methods and procedures for data collection and analysis to investigate the object in educational perspective.

The flexible posture of the researcher who uses qualitative research allows him to illuminate aspects and processes that may be hidden in a given phenomenon. Through good use of the methodological elements of this type of research, which also enables the activity of understanding the educational circumstances, it is possible to face the challenge of qualitatively analyzing data collected from various empirical materials, improving creative skills that legitimize the production of knowledge.

REFERENCES


OLABUENAGA, José Ignacio Ruiz; URIBARRI, María Antonia Ispizua. La descodificacion de la vida cotidiana: métodos de investigacion cualitativa. Bilbao, Universidad de deusto, 1989.


AUTHORS’ CONTRIBUTION
Author 1 - Coordinator of the research, active participation in the data analysis, writing of the text.
Author 2 - Research coordinator, data collection, data analysis and text writing.
Author 3 - Data collection, data analysis and text writing.
Author 4 - Formulation of the research, supervision of the research process and revision of the text writing.

CONFLICT OF INTEREST STATEMENT
The authors declare that there is no conflict of interest with this article.

The translation of this article into English was funded by the Fundação de Amparo à Pesquisa do Estado de Minas Gerais – FAPEMIG – through the program of supporting the publication of institutional scientific journals.

Submitted: 30/12/2020
Approved: 07/07/2021