Action-Research in higher education: a path to individual and social (trans)formation

A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social

Carolina Machado Saraiva
Águeda Maria Gomes dos Anjos

ABSTRACT

This research aims to investigate the possibilities of transformation brought about by university students who have experienced action-research during their academic training in projects of an extensionist nature. Along with this, it seeks to understand how the action-research process influences the training of administrators. In order to carry out this research, a Federal Institution of Higher Education (FIHE) was selected, on the basis of the intense extension work carried out by its professors. Six students, undergraduates and graduates, who had participated as volunteers or scholars in extensionist projects, were chosen to take part in the research. This study fits into the model of descriptive-conclusive research using non-probabilistic sampling for convenience. The data analysis method was inspired by Speech Analysis. The research data shows that students have a broader understanding of the administrative profession after participating in extension projects that adopt the action-research methodology. The action-research proposal should go beyond the boundaries of the methodology and be transmuted into a form of social relationship between university actors in the local communities, strengthening the training of administrators and qualifying them for a more dense, broad and critical professional performance.

Keywords: Action Research, education in Administration, Higher Education, Administration, Extension.

RESUMO

Esta pesquisa direciona-se à investigação das possibilidades de transformação, geradas pelos universitários que experienciaram a pesquisa-ação no período da formação acadêmica, em projetos de natureza extensionista. Aliado a este propósito, procura-se compreender como o processo da pesquisa-ação interfere na formação dos administradores. Para a realização desta pesquisa, escolheu-se uma Instituição Federal de Ensino Superior (IFES), com base no intenso trabalho de extensão realizado por seus docentes. Delimitou-se como *corpus 6* alunos,

Carolina Machado Saraiva ID
carolsaraiva@ufop.edu.br
PhD in Business Administration - UFMG
Doutora em Administração - UFMG
Universidade Federal de Ouro Preto
Mariana/MG - Brazil

Águeda Maria Gomes dos Anjos ID
agueda.anjos@gmail.com
Bachelor in Business Administration - UFOP
Bacharel em Administração - UFOP
Universidade Federal de Ouro Preto
Mariana/MG - Brazil

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

275

RESUMO

graduandos e graduados, que participaram como voluntários ou bolsistas de projetos de caráter extensionista. Este estudo enquadra-se no modelo de pesquisa descritiva-conclusiva por amostragem não probabilística por conveniência. O método de análise dos dados foi inspirado na Análise de Discurso. Os dados da pesquisa mostram que os alunos passaram a ter um entendimento mais ampliado da profissão de administrador, após participarem dos projetos de extensão que adotam a metodologia da pesquisa-ação. A proposta da pesquisa-ação deve superar as fronteiras da metodologia e transmutar-se em uma forma de relação social entre os atores universitários nas comunidades locais, potencializando a formação dos administradores e capacitando-os para uma atuação profissional mais densa, ampla e crítica.

Palavras-chaves: Pesquisa-Ação, formação em Administração, Ensino Superior, Administração, Extensão.

Introduction

In general, research is very much a part of academic daily life. The search for practical and applied knowledge and the question posed by Gayá Wicks *et al.* (2008, p.21) "how might we change things whilst studying them?" summarize the interests of those who take ownership of action-research (AR) as a path of practice and knowledge generation.

Action-research, generally speaking, proposes a collaborative and collective process that enables the exploration of life in society, starting with the diagnosis of the problems that need to be solved, with the involvement of the group being researched and the researcher, thereby facilitating the fostering of social change and the emancipation of those involved. According to Thiollent (2013), while conventional research is usually characterized by the principles of objectivity, i.e., the complete separation between the observer and the observed, the total substitutability of researchers and the quantification of information, in AR we can observe characteristics such as the understanding and prioritization of the problem, the search for solutions and participants' learning while maintaining scientificity.

Throughout the analysis of literature, theory and practice are a necessary combination for the practice of AR. In spite of not being widely recognized, Barbier (2002, p. 17) defends it as an epistemological revolution that is still to be widely explored, expressing "a true transformation of the way of conceiving and conducting research in the human sciences", thereby arguing the importance of reflection

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva │ Águeda Maria Gomes dos Anjos

276

in action-research and its implementation. Considered a means of approximation between theory and praxis, AR permits that while graduating, during the education process, they have the opportunity to engage in analysis, in relation to the theories studied, in understanding the reality of a certain group, thereby anticipating their future career, as a manager. Simultaneously, it allows this graduate, as an active member of this field, to develop a participative vision of reality, studying it and in fact being able to contribute to its reconstruction, promoting personal development as well as development within the group being studied.

On the other hand, Novaes' statement (2006, p.13) that "the intellectual is an agent of social change; the university student, an indifferent spectator" causes us to reflect on an individual who can, in the action-research process, assume the role of a university intellectual, of a potential professional in Administration, immersed in a reality that, according to Maranhão et al. (2016), allows these individuals to engage in critical thinking and behavior by intervening in a given context, "acting on the social connotations of the profession, emerging as intellectuals. They are also the ones who create their space, establish links with the community/society, who work to improve themselves and who can also contribute to the transformation of reality, together with the members of the group in which they are embedded. This research is therefore aimed at investigating the possibilities of transformation brought about and experienced by university students who have experimented with action-research during their academic training, in projects of an extensionist nature.

In this regard, this research seeks to understand how the action-research process influences the training of managers, both those who will follow an academic career and those who will focus on the development of projects together with companies. Our proposal is to understand whether action-research, which proposes a mutual development of both the researcher and the research object, reflects on the graduate's perception of management and which new skills or abilities are included in their work as managers and even in their understanding of what exactly comprises the field of management.

Action-research linked to extension projects, which is the focus of this work, has a special facility to train, that is, to foster the experience of students in other social environments, beyond the classroom and even different from their social background. Such experience could elicit in the student the understanding of different forms of social organization, with collectively shared knowledge. The relationship of the

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

277

University with the local communities is also a question presented to the students in the extension projects, primarily in those where the action-research method is used.

A Federal Institution of Higher Education (FIHE) was chosen for this research, due to the intense extension work carried out by its professors. The students, undergraduates and graduates, who participated as researchers (volunteers or scholars) in extensionist projects related to the Business Administration course, were chosen for the study. Therefore, in order to stimulate a reflection on the university intellectual/researcher/agent in relation to the transformation that took place during their involvement with the project and a reflection on themselves, as participants, with a view to contributing to the understanding of the practice of action-research (AR) during the academic training of future administrators, the question is how can the experience of action-research (AR) contribute to the transformation of undergraduate students of Business Administration?

The specific objectives of this research are (1) identifying the students in the Management course of the chosen Federal Institution of Higher Education (FIHE), who have worked in extension projects involving the action-research process (AR) as researchers (volunteers or scholars); (2) mapping the merits and challenges encountered by the students involved during the action-research process in the extension projects of a Federal Institution of Higher Education (FIHE), located in Minas Gerais; and (3) evaluating the influence of the action-research experience (AR) on the education of managers.

The purpose of this research is to contribute to the debate on the importance of the practice of action-research by graduates/undergraduates, both in the social sphere and in the individual sphere, relative to their theoretical-practical development as university intellectuals/researchers/social agents.

Literature Review

REGARDING THE ACTION-RESEARCH METHOD

For more than seven decades, the fundamental orientations on action-research (AR) itself have been the subject of debate among academics, presenting them in various forms during their activities.

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

278

Although there are differences of opinion and recognition of the characteristics of action-research in the work of anthropologist John Collier, part of his literature attributes the first studies of action-research to Kurt Lewin (1946), who defined it as a type of research that directly contributes not only to the production of books but also leads to action, referring to works of a social nature, developed by him, with the purpose of solving the practical problems of integrating ethnic minorities into American society. In 1986, during a conference at the Institut National de Recherche Pédagogique (INRP), action-research was defined as "research in which there is deliberate action to transform reality; research that has a double objective: to transform reality and to produce knowledge related to those transformations" (BARBIER, 2002, p. 17). In other words, in the course of the research process, two groups of objectives coexist and must be well delimited, clearly defined and equally met: those of research and those of intervention. The first group of objectives relates to the theoretical implications of the research and the second to the needs of the organisation/group involved.

Thiollent (2013) used the term action-research (AR), defining it as empirical-based research, "conducted in close association with an action or with the resolution of a collective problem and in which the participants representing the situation or problem are involved in a cooperative or participatory way.

Gleerup, Hulgaard and Teasdale (2020, p. 57), treat action-research (AR) as a case study and, in this setting, they point out that the researcher becomes

> [...] A participant who is at the same time the one that implements a system and evaluates it... An active researcher is not an independent observer, they become a participant, and the process of change becomes the object of the research. Thus, this research has two objectives: to act on problem-solving and contribute to the development of conceptual systems being developed.

Thus, one acts in the field of practice, investigating it and promoting a change in the social reality - a reality of which the researcher becomes part. As stated by Barbier (2002, p. 53):

> [...] while for a long time the role of science was to describe, explain and predict phenomena, requiring the researcher to be a neutral and objective observer, action-research takes the opposite direction for its purpose: to serve as an instrument for social changel.

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

279

According to Silva et al. (2014), researchers should, in fact, relate to community members, forming partnerships to identify issues of local importance, to develop ways to study them, to collect and interpret data and to act on the resulting knowledge from the action-research (AR).

Taking into account the nouns that make up the term action-research (AR), according to Chizzotti (2014, p. 19), there is research, which, as a generally defined process, is "[as] a long-lasting effort of observations, reflections, analyses and synthesis to discover the forces and possibilities of nature and life, and transform them for the benefit of humanity", Marconi and Lakatos (2011, p. 2), relate its origin "to a problem, a question [...] it will meet the need for knowledge on a certain problem or phenomenon"; and action, which is defined, according to Marconi and Lakatos (2011, p.74), as something that goes beyond "a simple act, but is a reflection and investigation of reality, aiming not only to understand it but to transform it. This meaning of action-research is still current and corroborated by Gleerup, Hulgaard and Teasdale (2020) in the study they conducted on this method and its effectiveness in educating critical subjects.

In the words of Thiollent (2013), action-research (AR) is a method of conducting applied research in order to develop diagnoses, identify problems and seek their solutions. In addition, it "requires knowledge, methods and techniques that are quite different from the intellectual resources mobilized in basic research", the latter being directed to the production of knowledge through the verification of hypotheses and the elaboration of theories.

In an effort to avoid misunderstandings regarding its real scope, Thiollent (2013) states that action-research (AR) is a type of investigation commonly directed at education, work, communication, etc. It is not about individual psychology or the macro social approach, but rather it is directed at groups or collectives of small or, at most, medium size, and is located on the intermediary line between what is characterized as micro-social, which:

> [...] usually involves a small number of actors who are able to observe each other. Face-to-face interaction characterizes this level: people, actions, behavior patterns, and specific aspects of the situation are all likely to be observed. However, in research practice, researchers focus their attention on certain aspects of the social scene. (BRANDÃO, 2001)

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

280

And, macro-social:

> [...] always involves many actors who do not interact directly. The researcher is only able to observe indicators and representations of the events, which must again be translated into hypotheses (interpretations) of the actions underlying these references. (BARROS, 2015)

Action-research (AR) is given a participatory character, a path by which the organization can seek the effective participation of all those involved, allocated to various sectors and hierarchical levels, along with their commitment and involvement in the process of change, seeking, based on scientific theories, practical and effective solutions to organizational problems and, consequently, the establishment of knowledge through practice, thus:

> [...] action-research is a type of social study with an empirical basis that is conceived and conducted in close association with an action or the resolution of a collective problem in which researchers and participants representing the situation or the problem are involved either cooperatively or participatively. (THIOLLENT, 2013, p. 16)

Besides its participatory nature, action-research (AR) also has a dynamic character, since, according to Elg et al. (2020), intervening in an organization, entering into a continuous system of relationships between people or groups, makes those involved think and reflect on their practices, as well as on the resulting changes in the environment of the organization, as well as in individual behavior.

> Action-research compels the researcher to get involved. They perceive how they are implicated by the social structure in which they are embedded and by the game of the desires and interests of others. The researcher also implicates others through their outlook and their individual role in the world. (BARBIER, 2002, p.14)

Action-research (AR) has a flexible structure, however, despite this characteristic, it is possible to identify 4 phases (THIOLLENT, 2013), and in relation to the last three, *research* and *action* are simultaneous:

1. The *exploratory* phase, in which the participants are identified, and the diagnosis is carried out in order to identify the problems and the capacity for action and intervention in the organization.

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

281

2. The in-depth research phase, where data is collected in line with the re-search project.

3. The action phase is when, based on the results of the previous phase, the planning of the action is undertaken, by discussing achievable objectives through concrete actions, considering actions as alternatives to solve the problem.

4. The evaluation phase consists of observation, redirection of the actions and the retrieval of the knowledge acquired during the process.

Lin et al. (2018), explain that the insights generated at the end of the research cannot be predicted at the beginning of the research and, for this reason, the construction of an "appropriate degree of reflection" during the intervention process is necessary and, although the processes of reflection and intervention are usually connected, they are in fact separate activities. In the intervention, it is possible to find out what the participants really say and do "in situations that really interest them", rather than what they can say or do in controlled situations. Reflection, on the other hand, is a time-consuming process: the taking of notes with observations, notes on methodology, notes on theory and personal notes form a "diary of sentiment" on the research. The action-research process (AR) must include a way of recording the reflection and the method used therein.

With regard to the quality of knowledge, Thiollent (2013) argues that it is limited by both the effectiveness of the intervention and the interest of the organization in the project, and clarifies what can potentially be achieved through action-research (AR):

•   The possibility to collect unique information from real-world situations and actors

•   The effectiveness of theoretical knowledge obtained from interactions between researchers and members of the organization.

•   The confrontation between formal and informal know-how in attempts to solve problems.

•   The generation of practical rules for problem-solving and action planning.

•   The results and the positive and negative lessons in relation to the success of the implemented actions.

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva │ Águeda Maria Gomes dos Anjos

282

- The potential for generalizations, based on several similar pieces of research and the experience gained by researchers

Based on the concept of Elg et al. (2020), the epistemological foundation of action-research(AR) is included in the following principles: a rejection of positivism; social praxis as a starting point and the arrival at the construction/resignification of knowledge; building knowledge based on intersubjectivity; its realization must take place in the natural environment of the reality being researched; it presupposes flexibility of procedures; it is integrated into a cycle of planning, action, reflection, research, resignification, replanning; and, continuously, it is focused on collective needs.

It is wrong to confuse action-research (AR) with a technique of political or social mobilization. Nevertheless, according to Thiollent (2013), it is a type of social research with a political function, one associated with an action or the resolution of a collective problem in which the researchers and the representative participants of the situation are involved in a cooperative or participatory way, in which the people involved have something to 'say' or 'do', beyond the concern that the generated knowledge is not for the exclusive use of the investigated group. It also clarifies that: "the political function of action-research is closely related to the type of action proposed and the agents considered" (THIOLLENT, 2013).

It could be said that action-research (AR) is a type of existential, integral, personal and community research; a type of research in which "one does not work on others, but always with others" (BARBIER, 2002, p.14); a type of research that is based on the social sciences and humanities. On the social sciences, because they are aimed at the study of man in society, therefore, according to Barbier (2002, p.14) "[...] traditional methodologies in the social sciences must be taken up, developed and reinvented continuously in the field of action-research" and, besides making use of the more traditional instruments for this type of research, considering everyday life as one of the gears for the construction of knowledge, "adopts or invents others". The same author also defends it as an epistemological revolution still to be widely explored, expressing "a true transformation of the way of conceiving and doing research in human sciences", one which deals with the aspects of the human being as an individual as well as their human cultural productions, things such as

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

283

the arts, letters and philosophy, seeing man in an intrinsic way, and at the same time dissociated from the universe of which he is part and author of subjective representations about him.

Considering, then, the action-research (AR) relationship with the human and social sciences, which assume research objectives different from those of the natural sciences, one observes the non-neutrality of the individual as a researcher, breaking with the idea of positivism, which predicts that society is guided by laws that are independent of man's will and actions (LIN et al, 2018), and, therefore, cannot be studied solely by the same methods employed by the natural sciences and is limited to explaining the phenomena in a neutral and casual manner.

Reflecting on all the characteristics listed above and on what constitutes an action-research process (AR), when practiced in academia, is enough that it becomes manifest. Unlike practices such as internships, academic centers or junior companies, it is in the environment of extension projects that the 4 phases of action-research (AR) described by Thiollent (2013) are identified. In this sense, it is the right place to, according to Chizzotti (2014), access a goal much higher than the result one wishes to achieve: the generation and structuring of knowledge, which is spread throughout the research process and subject to partial generalization, since it is strongly linked to context.

EDUCATION IN ADMINISTRATION AND ACTION-RESEARCH

The journey of higher education in Brazil began in 1808, with the foundation of the first schools taking place in the period when Portuguese families were first coming to the country and it was aimed at an absolutely restricted group of individuals, thus ensuring a professional degree, the guarantee of a privileged job and social prestige, and it remained almost unchanged in this way for a long period. In the 1920s, things began to look different, and during the debates on the public university, its functions in society began to be considered: to house science, scientists and to promote research.

Subsequently, an even greater expansion than the attainable limits of a Federal Institution of Higher Education (FIHE) was proposed. Through the Brazilian Constitution (BRAZIL, 1988), the principle of indissociability between teaching, research and extension is foreseen as activities that distinguish and justify the existence of

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

284

a Federal Institution of Higher Education (FIHE) and, as such, is expected to be an environment that contributes to the emancipation of subjects and the development of capable individuals and professionals, by socializing knowledge (teaching); producing knowledge (research); and exchanging knowledge and relating knowledge to practice (extension).

If we think about the education of an individual on an Administration course, apart from the mandatory internship, it is theoretical and somewhat based on previously validated knowledge, comprising the study of school models, theories and movements, in expository classes, involving the teacher - agent - and the student - listener. Foucault (1979, p. 273) shares this view: "Every subject has its discourse. A discipline conveys a discourse of the natural rule, of the norm, defining a code that is not exactly that of the law, but that of normalization".

However, nowadays, this education needs to go beyond such knowledge, to develop more than a passive individual, articulating with other know-how and skills required by the professional who will deal with many people and organizations, so:

> [...] the labor market demands professionals with problem-solving skills, the ability to work in a team, professional ethics and citizenship. For these students to acquire those attributes, educational institutions need to experiment with alternatives, with the objective of improving the teaching-learning process; seeking new methodologies, departing from the approach in which the teacher plays an active role and the student a passive role. (GUEDES, ANDRADE AND NICOLINI, 2015)

The term "practice" comes from the Greek '*praktike*', which means use, experience, exercise. For instance, one of the principles of action-research (AR) is, during the process of educating administrators, a possibility for graduates, future professionals, to begin to interpret and intervene in reality, to experience professional activity, to experience the use of the theoretical framework of administration in concrete situations in the business environment and to establish relationships with people, work, rules and situations.

In the context of higher education in the 21st century, according to Santos (2010), action-research is a condition for promoting democratization and emancipation through university practices. It is thus a methodology that generates projects, situated at the intersection between teaching, research and university extension,

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

285

and seen as a strategy for promoting an 'ecology of knowledge' by facilitating the exchange between scientific knowledge and popular, social or cultural knowledge.

Especially with regard to university extensions, general guidelines are provided to guide their formulation, implementation, monitoring and the evaluation of activities (SANTOS, 2010): (1) Dialogical interaction: which guides the development of relations between the university and other segments of society; (2) Interdisciplinarity and interprofessionality: which contribute to a combination of perspectives that are usually presented as dichotomous and mutually exclusive; (3) Teaching, research and extension articulation: which presupposes that extension activities are more effective if they are linked to the process of educating people and generating knowledge, replacing the pedagogical axis "student-teacher" with "student-teacher-community"; (4) The impact on student education: (5) impact and social transformation: which give the university extension a political character, reaffirming the transformative action of the extension, focused on the interests and needs of the majority of the population, improving public policies and promoting social and regional development.

Action-research can also be understood as one of the ways of breaking with the mechanistic logic of the school, as a formal educational institution, since, from the critical perspective in education, it encompasses school-society dialectics (MARANHÃO *et al.*, 2016), the first being the place where knowledge is "accumulated" and the second the place where "accumulated" knowledge is put into practice, based on reflections upon oneself, upon others and upon the environment studied.

RESEARCH AS A MEANS OF EDUCATION

Freire (1996) states that, in the modern age, the student needs to develop the ability to manage and administer their own education process, consequently developing autonomy.

According to Thiollent (2013, p. 17-18), in the action-research approach (AR), "researchers play an active role in equating the problems encountered, in monitoring and evaluating the actions that are taken as a result of the problems.

It is, therefore, a way of developing human potential, it motivates the researcher's relationship with and approach to action and responsibility in human matters, involving the research subjects:

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

286

> We then turn our gaze to the role of the student, as an intellectual university student/ researcher/social actor during this process of a potential two-way transformation of that which, at once, can be both an intellectual university student and an agent of social change. Thus:
>
> As science is not simply spontaneous knowledge, but the result of a demanding process of formal learning, methodical investigations and dependence on novice and sponsored researchers, the intellectual gains the power to comprehend and explain the phenomena, as well as to collaborate in processes of intervening in our reality. The investigation of relevant problems is the expression of true political acts as the achieved results initiate actions and these actions promote changes and cause impacts on reality. In this regard, it is worth asking: to what extent is it possible to dissociate thought from action? (LIMA, 2005, p. 146)

To this end, the definition of engagement is used, it is one of the requirements for action-research (AR) to be effective and transformative. The individual, then, when investigating reality, starts to gather themselves, in addition to the intellectual adjective, the engaged adjective, becoming an engaged intellectual, which, according to Chauí (2006, p. 12) "is the writer of current affairs who opines and intervenes in all relevant events, as they follow one another. It is a state of permanent vigilance", immersed in a space of intervention, social responsibility for the results achieved and the sharing of knowledge, directing the knowledge produced and developed within institutions of higher education in favor, also, of social interests. It is also a space conducive to learning, asserts Thiollent (2013), a strategy of self-education, not referring only to technical means but enabling self-reflection (autobiography), reflection on the environment and social practices in which the graduate is engaged as an active member of the community.

This is related to what Freire (1996) says about educational processes directed toward change, his ideas take into account three dimensions of learning: the cognitive dimension - learning new content and information; the skills dimension – the development of practical abilities; and the dimension of attitudes - behaviors fundamental to the application of the knowledge transferred and the skills developed as well as to the resulting relationships.

As such, action-research (AR) allows the study of life and can be regarded as having highly transformative potential and as a means by which to apply the theory studied in the Academy, reflecting on it and improving it, through the practice that will, in the future, be part of the daily life of the individual, as a professional in action.

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

287

Methodology

This study fits into the model of descriptive-conclusive research by non-probabilistic sampling for convenience. The corpus is composed of scholarship students and volunteers in extension projects from the management course being analyzed at the selected FIHE. The data analysis method was inspired by speech analysis. It is configured as descriptive because it fulfils the stages of analysis, observation, recording and correlation of aspects, involving phenomena without manipulating them. It is, therefore, that which analyzes, observes, records and correlates aspects (variables) involving facts and/or human or natural phenomena, without interference from the researcher, who only "seeks to discover, as accurately as possible, the frequency with which a phenomenon occurs, its relationship and connection with others, its nature and characteristics" (GLEERUP; HULGAARD; TEASDALE, 2020, p. 55).

Given the freedom of the researcher to define the most suitable instruments for obtaining results, considering the characteristics of their research, for investigation, based on the various types of research, as well as meeting the requirements of credibility, consistency and reliability, the technique used for data collection was interviewing. These interviews involved interviewer and interviewee, in order to obtain information from the interviewee about the subject under study and their experience in relation to it. This data collection procedure, consciously chosen from the objective of this survey, seeking to investigate the transformation of the individual and the perspective of how they, in turn, contribute to social transformation, met, among the six objectives, one specifically related to the determination of opinions on the facts, the purpose of which is to know what the interviewees think about the facts or what they believe them to be (SELLTIZ, 1965).

The data collection process involved the following steps:

1. The interview was structured with a view to greater coherence and validation of results and consisted of questions created from the relationship with a topic in the literature review related to action-research (AR), which, in turn, was related to one of the specific objectives of this survey. In order to verify the adequacy and effectiveness of the interview, a pre-test was carried out with three people from the Business Administration course at

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

288

FIHE, of both genders, one already graduated and the other two in the graduation process. On the part of the interviewer, it was easy to do it; and on the part of the interviewees, the observation was that the questions were well coordinated. The pre-test interviews lasted, on average, approximately 30 minutes and were not included in the group of 6 (six) interviews used for the analysis of the research results.

2. Identification of extension projects and their professors linked to the Administration course. The FIHE in question is located in the interior of the state of Minas Gerais. Subsequently, contact was made with the professors who had been identified to present this research, as well as an analysis of the presence of the four phases, in accordance with the structure described by Thiollent (2013), in the identified projects. Once the projects in which the presence of the four phases had been observed were listed, we moved on to the survey of the undergraduates/graduates who participated/participate in the extension projects of the Business Administration department, coordinated by the professors mentioned above. The investigation was conducted, taking into account part of the whole, with the number of interviewees being defined only after the background of the projects and of the participating students, considering the ease of contacting the latter. Due to the unfeasibility of applying the survey to all students of extension projects related to the Business Administration course of the FIHE, due to factors such as difficulty in contacting informants who no longer have a formal link with the institution, the number of interviews was limited to 06 (six), not including the 03 (three) interviews conducted during the pre-test. The period from 2017 to 2018 was considered for participation in extension projects as a scholar or volunteer. The graduates/undergraduates listed were contacted to present the research and to check whether they were able and willing to participate until the established quantity was reached. It was not possible to survey the total number of students in the course participant in extension projects. The representativeness of this non-random sample was taken into account through the sampling method, which, according to Marconi and Lakatos (2011, p.16), "consists of obtaining

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

289

a judgment on the total (universe) by compiling and examining only one part, the sample, selected by scientific procedures". Thus, the representativeness of graduates/undergraduates who participated in extension projects, linked to the Business Administration course under the coordination of different professors, was preserved.

3. *The interview was conducted* with the graduates/undergraduates who had taken part/take part in extension projects, linked to the Business Administration course, and structured in the same way, aiming to collect answers from all those interviewed to the same questions for comparison. The period of data collection was the second half of 2018 to the first half of 2019. According to Marconi and Lakatos, the type of interview is characterized by being that

> [...] in which the interviewer follows a previously established script; the questions asked are predetermined. It is carried out using an elaborate form and preferably with pre-selected people. (MARCONI E LAKATOS, 2011, p. 822)

With a view to the success of the data collection and the best interpretation of the collected answers, the interviews were recorded in audio format and later transcribed. To meet the validity requirements of, relevance, specificity and clarity, area coverage and extension, described by Tanajura and Bezerra (2015), some favorable conditions were offered and care was taken in the interviewer/interviewee relationship, such as establishing good communication between the parties so that the questions were clearly understood by the interviewee and answered spontaneously; with the stance of the interviewer, in order to maintain neutrality and avoid influencing the interviewee; and preservation of the anonymity of the interviewee.

The interview was carried out with 3 (three) graduates and 3 (three) recent graduates in Administration, all from the same FIHE.

The present research is classified as qualitative, which:

> [...] entails dense exchange with the people, facts and places that constitute objects of research, in order to extract the visible and latent meanings from this coexistence that are only perceptible with close attention... Different research traditions invoke the qualitative title, sharing the basic assumption that the investigation of human phenomena, always saturated with reason, freedom and will, have specific characteristics: they create and

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva │ Águeda Maria Gomes dos Anjos

290

> attribute meanings to things and people in social interactions and these can be described and analyzed, without statistical quantification. Many are the authors who refer to themselves as being qualitative, differentiating themselves by theoretical or methodological assumptions, research techniques or research objectives. They are generally opposed to quantitative research despite quantification being the only way to ensure the validity of a generalization, assuming a unique research model, derived from the natural sciences, which starts with a guided hypothesis, admits only external observations and follows an inductive path to establish laws, through objective checks, supported by statistically based frequencies. (LODI, 1974, p. 76)

The data was transcribed, and the interpretation procedure used in the study was done in light of the discourse analysis. In fact, between discourse analysis and the subject(s) involved there is language, which, according to Pêcheux (1997), in this context, is thought of in its practice, attributing value to work with the symbolic, with the political division of the senses, since the meaning is shifting and unstable. As Flores (2019, p. 286) states, it is in (and through) language that man constitutes himself and positions himself as a subject, appropriating the pronoun "I" to establish the consciousness of self.

> discourse analysis, as its name indicates, does not deal with language, nor does it deal with grammar, although all these are of interest. It deals with discourse. And the word discourse, etymologically, has in it the idea of course, of course, of running by, of movement. Discourse is thus a word in motion, a practice of language: with the study of discourse we observe the person speaking (ORLANDI, 2017, p. 15)

As a research methodology, the use of discourse analysis is different from statistical or content analysis, and although permeated by linguistics, it involves issues that go beyond this scope, linked to the ideological, historical and social aspects that (re)build the effect(s) of the meaning of words, when spoken and/or written.

> [...] Thus, the senses are always determined ideologically. There is no sense in which they are not. Everything we say therefore has an ideological trait in relation to other ideological traits. This is not in the essence of the words, but in the discourse, that is, in the way in which, in discourse, ideology produces its effects, materializing within it. (ORLANDI, 2017, p.43)

With this in mind, the relationship between interviewer (A) and interviewee (B), was related by Pêcheux (1997, 90): "this is not necessarily a transmission of

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

291

information between A and B, but, more generally, a transmission of 'meaning effect' between points A and B", that is, between interlocutors. It is necessary, then, during Discourse Analysis, to consign the enunciated - text or speech produced - to a certain formation of discourse - "a space in which enunciative materiality has the possibility of being interpreted and understood, from the historical and ideological position in which the subjects find themselves" (PÊCHEUX, 1997, 94). We are aware that discourse analysis works with meaning, that heterogeneous discourse is marked by history and ideology and that nothing new will be discovered, only a new interpretation or rereading will be produced. Therefore, in order to better identify/understand a certain discourse, we explored the points that presented relations of force between the objectives, the theory, once explained in the literature review, and the discourse of the interviewees, generating the appropriate explanations and reflections on how the experience of action-research (AR) can contribute to the transformation of graduate students in business education.

Data Analysis

In relation to the data analysis, the discourse was then correlated with the specific objectives, which in turn were related to the theory, formerly presented in the Literature Review. Thus, the first two (2) questions of the interview were related to the specific objective "to identify the students of the Administration course at FIHE who have experienced/are experiencing extension projects involving the action-research process (AR), as researchers (volunteers or scholars)". Among the interviewees, there are individuals who have recently started their experience in extension projects, such as Interviewee 1 and Interviewee 2, who have been in projects for less than 1 (one) semester. It was also found that some of the interviewees stayed in projects of this nature for a longer period, approximately 2 (two) years, as in the case of Interviewees 4, 5 and 6; and, approximately 3 (three) years, as in the case of Interviewee 3. When asked how they arrived at the projects in which they participated or participate, one of them stated that it was through a selection process, for some of them it was for personal motivation, upon receiving a non-targeted e-mail/invitation and for some it was through the invitation of the teachers involved in the projects, eviden-

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

292

cing that they were directed to the undergraduates who, according to their personal characteristics and posture, would have a greater probability of identifying more with this type of project, which involves a methodology where "one does not work on others, but and always with others". The excerpt below illustrates this situation:

> *(1) I did scientific initiation [...]more at the beginning of the course [...] Yeah, it was a very good experience for me, because it enabled me to identify that I had no academic profile, I really don't want to pursue an academic career as they stand today, not that I wouldn't teach, but, to write an article, to work in this sphere of academia, I had a kind of block. I stayed a little away and the teacher invited me to join this project of economic solidarity. When the teacher invited me, she already said, 'I think you'll identify a lot with this extension project because of your profile. [...] I think the extension project could actually suit you better because it's much more active. You have contact with society; you don't sit behind a desk, writing an article and publishing. (Interviewee 4)*

The following seven (7) questions are in relation to the third specific objective, "to map the merits and challenges encountered by students involved in FIHE extension projects during the action-research process (AR).

Regarding the way they were received by the public - being both male and female, ranging from the age group of individuals who are in the final years of high school to adults - the interviewees were unanimous in saying that they felt very well received. The following passages depict this situation:

> *(2) They are very needy, extremely needy people. So, we were very well received, because, any kind of attention to them was enough. So, I think we were very well received. (Interviewee 2)*
> *You see, all right, so I don't think I ever had, ever experienced any situation where I felt uncomfortable or I didn't feel welcome, on the contrary. (Interviewee 4)*

There was some variation in position regarding the possible observation of any difference in how project participants saw the university before contact with the project and how they began to see it after taking part. For some interviewees, there was some variation, in a positive sense, as mentioned below by the interviewee:

> *(04) I noticed that I had brought them (the communities) closer together, because, until then, it had seemed like this: the university in one corner and this group in the other. So, this attracted a little bit of their attention and affection to the university because of*

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

293

> *the project...a little bit of this matter to the point of gratitude...as if we had done them a favor and, in fact, no... I felt that there was a closeness between them and the university. (Interviewee 3)*

One of the interviewees suggested some points that could influence how receptive the community can be:

> *(5) It is also a question of us having a much broader critical and social side, where we can apply our knowledge so that it does not make that person's life more difficult and so that they can understand the knowledge you want to pass on to them. So, I think that for us to be accepted by the community, the way we managed to be accepted in the projects took a very long time [...] I was involved in an ongoing project. There are a lot of questions like that, about the interest and the desire to learn and to be able to work, or to get some certificate to be able to work. So, acceptance comes mainly from how you arrive in the community. How you introduce yourself to the community. We had to go through a whole process and it's very complicated that way, because when you go to the field, you deal with issues that you didn't think you could handle, so you have to be very flexible too. (Interviewee 6)*

It should be noted that most of the respondents who did not notice or were unable to identify ways of influencing how receptive the community could be were the graduates who had only recently started working on extension projects. Thus, it is inferred that this attitude may be due to the short period of time in contact with the community, the focus of the project. On the other hand, the lack of identification may have been caused by the fact that the graduates integrate projects that have already been recognized by the public, because they have been in operation for longer or because they serve people who have previously taken part in extension projects.

Regarding the flexible structure of action-research (AR) and the identification of the 4 phases (THIOLLENT, 2013), it was not possible to clearly detect them from the interviewee reports alone.

The exploratory phase, during which the agents are identified, and the diagnosis is made in order to rank the problems, the capacity for action and intervention in the organization was not clearly mentioned during the reporting. This could be justified by the fact that only undergraduate/graduate students were interviewed and extensionist actions were submitted by the professors. Another factor to be considered is that the extensionist actions of the aforementioned Federal Institution

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

294

may predict a timeline of up to two (2) years, although their continuity depends on the annual evaluation of the reports, so the (re)commencement of projects and the effective onset of the monitoring activities remain conditional on the submission and approval of reports and/or submission of projects, in the manner of public announcement, as well as the approval of the project by the Extension Committee. In addition, it is also possible for the monitors to be rotated, as well as being able to enter a project which is already underway.

The in-depth research phase, during which data is collected according to the research project, was more thoroughly identified, especially in the reports from interviewees who had spent longer on extension projects. See below for an explanation of this situation:

> *(06) [...] we had to be prepared, although the project is already well designed and ready, when we started to put it into practice, to go into the field, to meet people, to give the courses, we had to be prepared beforehand. So, for example, the course on economic solidarity, I set up, we set up, with the help of some materials, of course, but I had to do a very intensive research phase to be able to set up a course on economic solidarity, to be able to give this course to these people [...] Its material has to be adapted, it was not some academic work that I was going to present to the class. So, yes, it was research work, assembly, adaptation of something, finding activities that would be possible to develop with these people, because, this notion I already had, that I would have people with previous knowledge of some things, who had an "x" level of education and others who had a different level of education. So, it was a bit complex to assemble materials to serve this audience. But, yes, I had already done this research, preparation. (Interviewee 4)*

The action phase consists of placement in the field, working actively with the community. This phase must have achievable objectives and seek to solve the problem in question. The characteristics of this phase are described below:

> *(07) [...] during this project, we came to understand that there was more to it. What an association is ... what this group is ... then we started to research, and we got to the economic solidarity, and we began to understand what economic solidarity is, and we began to be more critical of our work too (Interviewee 3).*

The evaluation phase, which consists of observing, redirecting the shares and collecting the knowledge acquired during the process, has been further explained in the final questions, which are discussed below.

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva │ Águeda Maria Gomes dos Anjos

295

All respondents stated that there were records of the activities through reports issued by the monitors, photographic records and, in some cases, evaluation of the project by the target group. However, most of them responded that the material was delivered to the monitors, and there was no systematic resumption of individual reflection through these physical records. It was noted that they were intended as evidence of activities and the preparation of annual reports on the projects, forwarded to the Extension Committee of FIHE and, possibly, for reflection by the advisors regarding the proposal of activities for the future. There was an exception in relation to the recovery of records by Interviewees 3 and 6, due to the generation of scientific initiation work and articles, from the extension project in which they had taken part.

As for the experiences of applying the theory in practice, they were cited in more detail by the undergraduates/graduates who had links to entrepreneurial and communications projects, and their actions were often related to the areas of Finance, Logistics, Marketing and Human Resources.

Two of the interviewees commented on the direction of the disciplines of the administration course of the aforementioned FIHE, solely for the business environment, which may have brought about the development of the management and administration capacity of its educational process and, consequently, its autonomy (FREIRE, 1996), in a greater study effort in order to accomplish the entrepreneurship project. The excerpt below highlights this situation:

> (08) *We have absolutely nothing related to this content, at least I have not seen and I do not know of any discipline that works on this subject, for example, economic solidarity, cooperativism, we have also given courses in cooperativism, other forms of social establishments, social groups that are not a business, for example, or a foundation. So, I didn't see any of that in my course, so I put other things into practice, other knowledge and we had to pursue that knowledge because we didn't have it. (Interviewee 4)*

According to the accounts of one of the interviewees, in one of the projects, the initial objective of the action was related to applying the knowledge associated with management, regarding the organization of stock. However, as the project unfolded, given the collective needs, the goals of emancipation and autonomy of the target group became the principal motivation, which remained tied to the theory. An excerpt from interview 3 illustrates this issue:

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

296

> *(09) So the work started first with a process of organizing the stock and suddenly we were like - let's make these women understand that this space is theirs, that they have right to occupy that space and to exchange knowledge. Then, of course, the technical part came together, but it ceased to be the central priority. (Interviewee 3)*

In this conversation, the dynamic character and coexistence of the two groups of objectives related to action-research (AR) are identified, the first group of objectives relating to the theoretical implications of the research and the second, the needs of the organization/group involved. Sobre os desafios com os quais os graduandos / graduados se depararam, foram relatados: (1) a preocupação com a didática, principalmente, nos projetos que previam palestras e cursos ministrados pelos monitores; (2) a preocupação com a adaptação dos conteúdos teóricos para uma linguagem que permitisse um melhor entendimento pelo público e que despertasse maior interesse; (3) a expectativa que as comunidades atendidas criam em relação ao projeto e o receio dos monitores do não alcance dos objetivos; (4) questões relacionadas à estrutura física e de funcionamento das comunidades atendidas para recebimento dos projetos; (5) dificuldade inicial de relacionamento entre alguns monitores e algumas comunidades atendidas, em função do sentimento de desconfiança dessas últimas; (6) a necessidade de busca por outros conceitos e conhecimentos necessários para o cumprimento dos objetivos dos projetos, os quais, não foram tradados na grade do curso; e (7) a falta de compromisso e empenho por parte de alguns monitores que integravam a equipe do projeto.

Regarding the challenges that the undergraduates / graduates have faced, the following have been reported: (1) a concern over the didactics, especially in the projects that included lectures and courses given by the monitors; (2) a concern over the adaptation of the theoretical contents to a language that would permit a better understanding by the public and that would also generate greater interest; (3) the expectation that the communities served create in relation to the project and the concern of the monitors regarding failure to achieve the objectives; (4) issues related to the physical structure and workability of the communities served to receive the projects; (5) the initial relationship difficulty between some of the monitors and some of the communities, due to the feeling of distrust among the latter; (6) the need to search for other concepts and knowledge necessary for the fulfillment of the objectives of the projects, which were not incorporated into the course schedule; and (7)

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

297

the lack of commitment and effort on the part of some monitors who were part of the project team.

As far as frustrations are concerned, they were barely mentioned and were related to the (1) lack of continuity of projects; and (2) lack of response and participation of the target group, in some cases.

On the merits, the following were mentioned: (1) the possibility of using what was learned at the university for the benefit of society; (2) the feeling of the importance of the projects and the request for the continuation of actions by some of the communities served; (3) the sense of the emancipation; (4) the achievement of the objectives outlined in the projects; (5) the changes in those involved; (6) the articulation between people, whether they are undergraduates, professors or the community served; and (7) the extension of the university into the community.

The final block, containing 3 (three) questions, was designed to "assess the influence of experience in action-research (AR) on the training of administrators".

When asked about the reflection on participation in the project, this, according to Thiollent (2013), is a question related to the evaluation phase, the slogan was "transformation", coincidentally, one of the most relevant words in this work, as highlighted below:

> *(10) Transformation like this, clearly, I think the point would be: I never imagined myself as an administrator, at the time I was not yet an administrator, but I never imagined myself inside the business course, having the opportunity to do what I did like this, to work on projects, let's say, in quotes, social. To deal with a part of the community that I never thought I would. [...] I really didn't think that the university made this kind of work possible, this kind of placement in the community, in society, so for me, it transformed me as a person, I can say, I don't know, not even 100, I would say 200%, [...] I have no doubt that if I hadn't taken part in the projects I wouldn't have this idea, I wouldn't have transformed myself as a person, as a professional. [...] the extension for me was the door to a world of such possibilities, what we, as administrators, can do for people, you know? How is it possible...? of course, at the time, I had much less knowledge than I have today, but somehow it gave me that outlook. (Interviewee 4)*

Another word cited in relation to this reflection was "learning" which is internalized. In the sense of learning that it is not just because one is in a university that one knows more than one who has not had this privilege. One can have more knowledge in relation to some specific subject(s), however, knowledge is such a

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

298

broad term that the adjective "specific" doesn't really do it justice. To learn that, daily, we learn from each other and from our relationship with each other, the extension projects and action-research (AR) are spaces for this kind of learning; for exchange; for practice and the maturing of theory, which is related to the strategy of self-training, not only referring to technical means, but enabling self-reflection (autobiography), reflection on the environment and on the social practices in which the graduate is engaged as an active member, belonging to the collective. This is illustrated in the excerpt below:

> *(11) The knowledge you gained also remains and then you end up resuming the learning in various situations that you go through in your daily life [...] It's an internalized learning process that sometimes you wouldn't only have in the classroom, often you wouldn't have only in the classroom, because memorizing a theory is one thing, applying it is so different from what you see in books. (Interviewee 6)*

Regarding the experience of taking part in extension projects and the contribution to the practice of (future) administrators, the following were cited: (1) the development of communication between organizations; (2) the development of emotional intelligence; (3) interpersonal relationships; (4) the experience of theory in practice and reality; and (5) a better understanding of theory related to practice. As a human being, the development of sensitivity and adaptability were also scored, as shown in the excerpt belo:

> *(12) You can see that there is a large part of the population that is not educated, that has no theoretical knowledge, but, you see that all people, in every way, give you the knowledge, have experience and that experience is also learning, not only theory, I think that as an administrator you become more human, more observant, more sympathetic to other people, to adapt reality to other people, to know that there are different types of people, different worlds, different forms of learning, different ways of applying knowledge. So, I think you learn more than you teach with extension and I believe in extension and research very much. So, I think that as a manager you can do that, you can better manage a company or an organization because you know that there are different worlds in there. (Interviewee 6)*

On the subject of participation in extension projects in higher education, all respondents stressed the importance of this and the need for greater ownership and dissemination by the university. See excerpt from the interview below:

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

299

> *(13) The reflection that I do is that even though it is an obligation that the university has, this is still done very little and the effects that this extension work has on the community are much greater than they appear. So, sometimes, if one does this kind of work, and the way that the community, or the university itself, notice it is not as it should be, because the effects, although they are not visible, are much greater than the paper itself, when one does an article that is not exposed to society or when the professor gives a class inside the university and stays only for the students.[...] The relevance of this external work still has to be much greater in the university, because I have noticed very, very great importance. (Interviewee 1)*

Finally, it is important to point out that some of those interviewed mentioned that they noticed the lack of knowledge of some of the communities served in relation to the possibility of a relationship between society and the university, the latter being, for some people in the community, reduced to just an educational institution. Moreover, in all interviews, at different times, the interviewees showed that they believe that taking part in extension projects, in addition to all personal and professional benefits, is also a commitment that they have to give back to society the opportunity to study in a Federal Institution of Higher Education, financed with taxes that everyone pays, and can therefore be associated with social responsibility.

Closing Remarks

In view of the possibilities for transformation generated through the practice of action-research (AR) during academic studies and also the question of Gayá Wicks et al. (2008, p.21,) how can we change things while studying them? it is observed that those who have experienced/experience action-research (AR) during graduation, by means of extension projects, recognize its importance and identify that there is a convergence of theory and practice, enabling that while graduating, in the education process and, at the same time, an individual, in constant construction of their intellectual life, has the opportunity to practice the work of analysis, of the relationship with the theories studied, of understanding the reality of a certain group, thus anticipating their future professional life, as an administrator.

Unlike Novaes' statement (2006, p.13), according to which "the intellectual is the agent of social change; the university student, an indifferent spectator", the

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva │ Águeda Maria Gomes dos Anjos

300

interviews demonstrate that in this space of extension projects and the practice of action-research (AR), the student assumes the role of a university intellectual by relating with people and becoming an active participant in the field, developing a participatory vision of reality, studying it and being able, in fact, to contribute to its reconstruction, promoting development in themselves and in the group studied. It is stressed here that this student is in no way an imposer of their will or of what they consider to be right and viable for that particular situation, but, they are part of a collective and collaborative (re)construction that must involve all the participants of the group of which they are also a member. Despite the fact that there has not been a deeper analysis of the social transformation generated by extension projects involving AR, which can be justified by having interviewed only students and recent graduates, the perception of a change in the group is noted in the discourse of the interviewees and also in the other individuals who comprise such groups, in the sense of bringing them closer to a Federal Institution of Higher Education (FIHE), a reality still distant for many; this is the case for the students who have not yet been able to participate in the project; to increase the affectivity in the group and in some individuals the desire to continue their studies; to give them greater autonomy; to develop relationships, to engage in teamwork and the exchange of knowledge; as well as to awaken in these individuals the feeling of self-esteem and of their respective possession of knowledge.

The results of the research carried out contribute to the understanding of the importance of university extension for business students. Many of them highlighted how their professional lives were enhanced by the experience developed in the extension projects in which they had taken part or are still taking part in. Even those who already understood that they did not have the so-called "academic profile" stressed that the experience with extension provided knowledge of the management field that curricular disciplines and professional experiences did not. Another important result of the research was to confirm the hypothesis predicted in the action-research methodology, that there is a transformation of the student in the research process, that is, that the exercise of the intervention method is able to modify not only the corpus of the project but also the governing body of the research itself. Thus, action-research has become an excellent pedagogical tool, overcoming research barriers and positioning itself as an educational practice.

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

301

Among the essential activities of the FIHE are teaching, research and extension, inseparable from each other. In fact, teaching and research already occupy privileged places in graduate courses, although, it is necessary to spread the extension more widely, as it is an interdisciplinary, educational, cultural, scientific and political process that promotes transformative interaction between universities and other sectors of society. In addition, there is the possibility of appropriation by those graduates who do not identify themselves so much with scientific research, who have a profile more focused on applied research. This greater diffusion is also the responsibility of professors, who, as supervisors, greatly influence the results generated both for society and for undergraduates.

Possibly, this practice will be optimized from 2020, when participation in the extension will become mandatory for all graduate students, and not only for those involved in actions out of self-interest or need, such as volunteers or scholarship holders. According to Federal Law 13.005, of June 2014, the National Education Plan was established, with goals and guidelines for education throughout Brazil and, especially, for higher education, strategy 7 of goal 12 states that universities must "guarantee, at least, 10% (ten per cent) of the total curricular credits required for graduation in university extension programs and projects", a process called "extension curriculum" the extension in higher education in Brazil, approved by the National Education Council.

In the development of this research and the specific objectives proposed therein, we were able to observe that action-research has the capacity to influence not only the conduct of research or extension projects but also the construction of the student's understanding of the profession. The data show that students started to have a broader understanding of the profession of administrator, after taking part in extension projects that adopt the action-research methodology.

This amplification involves the understanding that there is a whole social area in which the administrator can act, conducting projects for associations, cooperatives and the like, fostering the businesses of local communities. For undergraduates who choose a career in companies, there are also contributions, in the sense that the group of employees is composed of a multitude of people with different life stories and social backgrounds, requiring empathy from the administrator and the ability to establish dialogues in terms of each group, making itself understood and

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

302

seeking the same from others. Therefore, as a result of the research, the action-research proposal must overcome the frontiers of the methodology and be transformed into a form of social relationship between university actors in local communities, enhancing the training of administrators and training them for more dense, broad and critical professional performance.

In view of the above, it is necessary that the subject to which this research refers is continuously studied and revisited, considering that it will be something practiced more at university. In this context, the following research can be developed: the increase in the number of respondents who have experienced/experience extension projects, involving action-research (AR), considering other courses and areas of knowledge; the performance of positioning the analysis of students who have not experienced extension projects, involving action-research (AR) and comparing it with that of students who have experienced/experience extension projects, involving action-research (AR); the study of the awareness of transformation that took place during extension projects, involving action-research (AR) from the teachers' point of view; the study of the perception of those who benefited from extension projects, involving action-research (AR) and their subsequent comparison of how transformation is recognized from the point of view of the student and/or teacher; as well as mapping the productions related to the subject action-research (AR) in business education.

It should be noted that the extension can, in fact, contribute to the integral education of the student, stimulating their development as a critical and responsible citizen. It achieves its goal, according to Chizzotti (2014), when it enables the generation and structuring of knowledge, diffuses it throughout the research process and subjects it to partial generalization, especially when it is deployed in scientific initiation projects and article production, as was mentioned in some of the interviews.

However, relating extension projects to the methodological proposal of action-research (AR) more clearly, putting forward undergraduates which characterizes it, where and how it manifests, is absolutely necessary so that in addition to what is presented as a benefit, they themselves understand that a Federal Institution of Higher Education (FIHE) is only complete when it enables and offers conditions for teaching, research and extension activities to be contemplated and fully practiced.

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

303

References

BARBIER, R. **A pesquisa-ação**. Brasília: Liber Livro, 2002.

BARROS, T. **Por uma metodologia do discurso:** noções e métodos para uma análise discursiva. In: Uma trajetória da Arquivística a partir da Análise do Discurso: inflexões histórico-conceituais [online]. São Paulo: Editora UNESP; São Paulo: Cultura Acadêmica, 2015, pp. 73-95. ISBN 978-85- 7983-661-9.

BRANDÃO, Z. **A dialética micro/macro na sociologia da educação**. Cad. Pesqui. [online], 2001, nº 113, 153-165p. ISSN 0100-1574. Disponível em: <http://dx.doi.org/10.1590/S0100-15742001000200008> Acesso em: 08 ago. 2018.

BRASIL. Constituição, 1988. **Constituição:** República Federativa do Brasil. Brasília: Senado Federal. 1988. Disponível em: <http://www.planalto.gov.br/ccivil_03/Constituicao/Constituicao.htm.> Acesso em: 03 nov. 2018.

CHAUÍ, M. **Intelectual engajado:** uma figura em extinção? In: NOVAES, Adauto (org). O Silêncio dos intelectuais. São Paulo: Companhia das Letras, 2006. 19-44p.

CHIZZOTTI, A. **Pesquisa qualitativa em ciências humanas e sociais.** Petrópolis: Vozes, 2014. 6. ed.

ELG, M., GREMYR, I., HALLDÓRSSON, Á., WALLO, A. Service action research: review and guidelines. In: **Journal of Services Marketing**, v. 34, n. 1, 2020, pp. 87–99. DOI 10.1108/JSM-11-2018-0350

FLORES, V. **Problemas Gerais da Linguística**. Editora Vozes: 2019.

FOUCAULT, M. **Microfísica do poder.** Rio de Janeiro: Edições Graal, 1979. 26.ed.

FREIRE P. **Pedagogia da autonomia:** saberes necessários à prática educativa. São Paulo: Paz e Terra, 1996. 25.ed.

GAYÁ WICKS, P.; REASON, P.; BRADBURY, H; **Living Inquiry:** Personal, Political and Philosophical Groundings for Action Research Practice. In: REASON. P.; BRADBURY, H. The SAGE Handbook of Action Research: Participative Inquiry and Practice. London, Thousand Oaks, New Delhi, Singapore: SAGE, 2008. 15-30 p.

GUEDES, K.; ANDRADE, R.; NICOLINI, A. A avaliação de estudantes e professores de Administração sobre a experiência com a aprendizagem baseada em problemas. Administração: Ensino e Pesquisa (RAEP), v. 16, p. 71, 2015.

GLEERUP, J., HULGAARD, L., TEASDALE, S. Action research and participatory democracy in social enterprise. In: **Social Enterprise Journal**, v. 16, n. 1, 2020 pp. 46-59. DOI 10.1108/SEJ-02-2019-0012

LEWIN, K. **Action-research and minority problems.** Journal of Social Issues, 1946. 34-36 p. nº 2.

LIMA, M. C. **O método de pesquisa-ação nas organizações:** do horizonte político à dimensão formal. GESTÃO.Org. Revista Eletrônica de Gestão Organizacional, 2005. 139-152, v.3.

LIN, C., KIM, MJ., KIM, KH., MAGLIO, P., Using data to advance service: managerial issues and theoretical implications from action research. **In: Journal of Service Theory and Practice**, v. 28, n. 1, 2018 pp. 99-128. DOI 10.1108/JSTP-08-2016-0141

LODI, J. **A Entrevista - Teoria e Prática**. São Paulo: Pioneira, 1974.

MARANHÃO, C.S.A.M.; FERNANDES, T.A. FERREIRA, P.T.M.; SANTOS, F.C.P.; **Da Economia Solidária à formação crítica em Administração:** um relato de experiência pedagógica. Além dos Muros da Universidade: Revista Cátedra AMDE, 2016. 88-101 p, v.1.

Action-Research in higher education: a path to individual and social (trans)formation
A Pesquisa-Ação no ensino superior: um caminho de (trans)formação individual e social
Carolina Machado Saraiva | Águeda Maria Gomes dos Anjos

304

MARCONI, M.; LAKATOS, E. Metodologia do trabalho científico: procedimentos básicos, pesquisa bibliográfica, projeto e relatório, publicações e trabalhos científicos. 7. ed. 6.reimpr.São Paulo: Atlas, 2011.

NOVAES, A. **Intelectuais em tempos de incerteza**. In: NOVAES, Adauto (org). O Silêncio dos intelectuais. São Paulo: Companhia das Letras, 2006. 7-18 p.

ORLANDI, E**. Discurso em Análise**: sujeito, sentido, ideologia. Campinas: Pontes, 2017

PÊCHEUX, M. **Semântica e discurso. Uma crítica à afirmação do óbvio**. Tradução Eni Pulcinelli Orlandi [et al.] Campinas: Editora da Unicamp, 1997

SANTOS, B. S. **A universidade do século XXI.** Para uma reforma democrática e emancipatória da Universidade. São Paulo: Cortez, 2010. 3. ed.

SELLTIZ, C. **Métodos de Pesquisa das Relações Sociais**. São Paulo:HERDER-Editora da Universidade de São Paulo, 1965.

SILVA, I. C.; COSTA FILHO, C. G.; BRITO, M. J. Investigação Apreciativa e Pesquisa-ação: Relação Dialógica, Complementaridade ou Oposição? **Revista Gestão.Org**, v. 12, n. 2, 2014. p 163-172

TANAJURA, L. L. C.; BEZERRA, A. A. C. **Pesquisa-ação sob a ótica de René Barbier e Michel Thiollent:** aproximações e especificidades metodológicas. Santos: Rev. Eletrônica. Pesquis educa, jan-jun. 2015. 10-23 p, v. 07, n. 13. Disponível em: < http://periodicos.unisantos.br/index.php/pesquiseduca/article/view/408.> Acesso: 01 nov. 2018.

THIOLLENT, M. **Metodologia da Pesquisa-Ação**. São Paulo: Cortez, 2013.