

ACTION RESEARCH AND PROJECT-BASED LEARNING IN THE FRAMEWORK OF THE TEACHING FOR UNDERSTANDING PEDAGOGICAL MODEL. AN EXPERIENCE IN “VISION MUNDIAL” SCHOOL IN MONTERIA’S VULNERABLE COMMUNITIES

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Abstract

This article presents results from "Action Research and Project-Based Learning in the Framework of the Teaching for Understanding Pedagogical Model" in the Education Master's at Universidad de Cordoba - SUE-CARIBE¹. The purpose of the document is to show the incidence action research and Teaching for Understanding pedagogical model have in educational quality for communities in conditions of poverty and vulnerability, in the Vision Mundial school in Monteria, Cordoba. Methodology is based on the action research model, which enables participants to act reflexively and collectively on the problems that afflict them, in order to transform both the problems and themselves. Results' analysis shows that quality education for population in poverty is not only necessary, but also possible, in order to attenuate the strong stratification embedded in the education system at local and national levels.

Keywords: action research, Teaching for Understanding, classroom projects, pedagogical practices, vulnerable communities.

Introduction

The department of Cordoba, as well as every department in the Colombian Caribbean coast, has its social, economic, political, environmental and cultural particularities. Socially, serious problems of violence have become evident in recent years, especially in the rural area. Populations have been displaced and

State Universities of the Colombian Caribbean, with advanced training strategy for excellence educators, who participate in Caribbean region educational policies formulation and implementation, with national transcendence and internationalization.

amid their relocation process, are forced to overcome adversities that include settling in new territories that fail to deliver guarantees for their education, health, housing, transportation, utilities, among other needs.

According to Negrete (2007) these migratory processes have resulted in increased populations in cities such as Monteria, the capital of Cordoba, which now has over 40 atypical settlements; political and economic violence have brought in approximately 124,484 immigrants, contributing to creating a society that struggles amidst poverty and inequality, with mounting unfairness, hopelessness and a feeling of injustice.

This problem is currently growing in Monteria, to the extent that children, teens and youngsters in the educational system are in the frontline of violent conflict, growing up in highly vulnerable conditions that prevent them to develop their potential as social subjects.

This study was developed in the Vision Mundial school, operated by the NGO World Vision Colombia in the city of Monteria, which has 5 directors, 8 administrative staff, 38 teachers and 789 students spanning preschool to technical secondary education in computers, who come from the poorest communities in communes 4, 5 and 6 (mostly made up by people with a background of violence displacement, with high vulnerability and inequity conditions).

Accordingly, theoretical and conceptual considerations were taken into account in terms of action research and pedagogical and didactic strategies, within the

Project-Based learning framework and the Teaching for Understanding pedagogical model.

The study's methodology had a qualitative-interpretative approach based on the action research method; it involved different members of the educational community, considering academic, administrative and community development spaces underlying the teaching and learning process inside and outside the school, as action research is a tool for collective introspective inquiry conducted in social situations with the aim of improving the rationality and justice of social or educational practices, and their understanding of said practices and situations in which they take place (Kemmis, S. and McTaggart, 1992); qualitative approach drives its inquiry, instead of the ambition of proving truths. From this perspective, Perez Serrano (1994) states that qualitative research is considered "an active, systematic and rigorous process of guided inquiry, in which decisions are made in terms of what can be researched to the extent of its area of study" (p. 46).

The results have proved that inclusive social development is possible, departing from reflexive, collective and participative work, with successful and replicable pedagogical practices, based on action research and Project-Based learning in the framework of the Teaching for Understanding pedagogical model in highly vulnerable educational communities.

Theoretical Frameworks

Teaching for Understanding as A Bet to Succeed in Educational and Social Transformation

What does it mean to understand? How can we teach in order to achieve understanding? How can students learn to understand? Which study programs, and evaluations are the best to support Teaching for Understanding on a daily basis? How can training build deep understanding of discipline content and of the complexity of teaching in educational institutions? These questions, which are tackled everyday by teachers regarding teaching and learning processes, make it necessary to analyze the theoretical and methodological implications of the Teaching for Understanding model as an alternative to achieve educational and social transformation.

The Meaning of Teaching for Understanding

One of the main concerns within academic spheres relates to new educational paradigms that contribute to the creation of a society that is more critical, reflexive and constructive. The thin line that divides the teaching and learning process questions the gap between theory and practice of pedagogical actions. As expressed by David Perkins (1995):

... It is not that we don't know enough to have schools in which a large number of people with different capacities, interests, sociocultural and family backgrounds may learn. The problem is that beyond learning developments, research on efficient schools, studies on change and innovation likelihoods

in education, the leap between our knowledge's enunciation and "active use" is very complex (p. 26).

Yet, in the last 50 years, research related to the consolidation of scenarios that contribute to the generation of meaningful and genuine learning has taken a lead in academic spheres, Harvard University's Project Zero was collaboratively developed by researchers and teachers that focused on the theoretical contributions of David Perkins, Nelson Goodman, Howard Gardner, Vito Perrone, J. Bruner, R.F. Elmore, M.W. McLaughlin and many others.

The Teaching for Understanding educational project is a design proposal for classroom and schoolwork that recommends a planning model that encompasses an idea rationale on teaching and learning, as well as an ethical stance on the certainty that everyone can learn and that everyone can do it with appropriate teaching.

Paula Pogr  (2007) reflects on the contribution of the Teaching for Understanding model, highlighting the following aspects:

- Builds a didactic proposal to turn constructive classroom work into a reality.
- Has a common code with clear and simple language to ease communication and experience exchange.
- Articulates different components of didactics' traditional agenda: objectives, content, activities and evaluation, in an extensive proposal to finally bring theories and practice closer together.

- Provides tools to make the wish of genuine quality education for all a reality: educating for social diversity, educating respecting individual differences.
- Teaches integrating thoughts, feelings and actions.
- Educates to integrate thoughts, feelings and actions.

All of these aspects reaffirm the importance of the Teaching for Understanding model, which promotes the development of shared intelligence to create and sustain cultures of understanding (Perkins, 1995).

But what does it mean to understand? In the words of Perkins (1999), “it is the ability to think and act with flexibility based on what one knows ...” (p. 1). Which means walking the paths of knowledge with the combined effort of prior experiences and critical analysis of social reality. It is to take a glimpse into the unknown through meaningful learning.

On the other hand, the Teaching for Understanding model has been recreated and used to teach at all levels: from initial cycles to higher education and in teacher training in diverse countries, becoming an interesting tool for teachers of different levels and parts of the world to jointly reflect about teaching.

First, the fact that ***understanding develops generative topics***, needs to be taken into account, in other words: understanding is consolidated with the reflexive use of concepts, ideas, relative topics of a discipline or field of knowledge, which have certain characteristics that prompt them as learning enablers; they become

learning enablers because the importance of a topic is its generative capacity, acting as a point from where many understanding lines stem, allowing different students to progress in the proposed knowledge from their own processes.

Additionally, ***the model develops understanding goals***; therefore it allows identification of concepts, processes and skills that teachers want the students to learn. It focuses on key aspects of the generative topic identifying the most relevant understanding in students.

Understanding is considered performance, it is the capacity to relate, operate, describe, compare, differentiate, adequate, narrate, diagram, analyze, decide, represent, sequence, organize, explore, etc. These activities go beyond memorization of concepts and routine skills. By doing these activities, students reconfigure, expand and apply what has been taught while exploring and building new learning based on prior learning; thus helping to build as well as to demonstrate understanding.

Lastly, ***Understanding is a continuous evaluation***; therefore, it is the process of systematically providing clear answers to students about their work, contributing to the improvement of their understanding processes. This demands performance to be steered by evaluation criteria that are clear, public, connected to understanding goals and guided by conducting threads.

Finally, Teaching for Understanding offers a wide range of concrete ideas for planning: sequencing understanding performance in a way that builds from simple

to more complex performance goals... or constant use of continuous valuation tools to give feedback and support to students throughout the process (Perkins, 1999).

Classroom Projects as Integrating Didactic Strategy

Classrooms are school spaces created to build knowledge and to establish teaching and learning processes; it is a place for coexistence and educational exchange among students and the teacher. In the old days, it was considered a prince's palace, a place of respect and reflection.

It is there where teacher and students abide by a pedagogical contract in order to build group experiences, respecting the conditions, sharing feelings of solidarity and collaboration, a place that can turn into a laboratory or a workshop; sometimes, the space is mobile and its surroundings transform the environment.

Overall, the classroom is acknowledged as a space of production and reproduction of ideological and cultural content, and social relationships that constitute it and maintain it. In that sense, the classroom can be thought of as a space in which the social and cultural orders, as well as diverse opposition manifestations, concur (Guzman and Jimenez, 1991, p. 338).

From that perspective, knowledge is built actively by the learner through interacting with others in a social setting, and the learner may personally elaborate on what he/she learned, making it more functional and meaningful (Denegri, 1996; Denegri

and Martinez, 2001). This entails the student to face new content with a set of acquired concepts, representations and knowledge, as well as with own theories that give explanations to the world.

These preconcepts include attitudes, motivations, expectations and attributions related to students' life experiences; it is not about transmitting content but about joint constructions in which the teacher (as expert and facilitator) offers the tools for the student to establish relations, but the latter is responsible for building his/her own knowledge (Denegri, 2000).

This framework endorses a qualitative change in the way people see the world, the way they do things, the way they teach. It is a change that is understood as an individual and group dynamic, a new school development that reestablishes the nature of the school's social and cultural transformation; which is also a way of systematically organizing learning and teaching by directly involving members of the process with the integration and correlation of knowledge areas, resulting in each member performing as planned and executed in the curriculum.

Likewise, students must be able to establish substantial relations between prior and new knowledge, this implies modifying the attained knowledge schemes in order to build up to more complex schemes. Meaningful learning requires intense mental activity, while the teacher stimulates cognitive conflict with activities conducive to physical and mental action.

Consequently, classroom projects in teaching and learning processes are a fundamentally interactive process in which teacher-student relationship plays a critical role, as well as students' relationships. Thus, classroom projects favor information exchange and confrontation of different points of view, the latter requires the teacher to be particularly attentive to group interactions, intervening to lead to conflict analysis and resolution in a climate of acceptance, joint collaboration and tolerance. This favors students' autonomy in terms of decision-making and of assuming their liabilities as group members. From this outlook, meaningful learning gains importance, and the project becomes an innovative alternative in which the student builds knowledge in a wide array of situations and circumstances (Coll, 1981).

Sayago Z. (2003) similarly indicates that classroom projects trigger questioning and problem identification processes in an entertaining way thanks to two parties: students, with their inherent curiosity, knowledge and desire to build or experiment; and teachers' proposed activities, originating a series of questions that lead to understanding and learning, which also allow globalization and integration of learning and favor meaningful learning.

Engaging in classroom projects, students assimilate and give meaning to the proposed content by establishing relations with prior attained knowledge and new content (learning objective). To this regard, the projects' main function is delivering educational quality to teachers, students, parents and other community members

in order to guarantee equity and adaptation of the social environment's specific needs.

Indeed, according to Hernandez and Ventura (1994), classroom projects incorporate an integrating attitude towards content, and are framed in the globalization expectation as an accumulation of subjects, interdisciplinary and learning structure. However, the idea of an integrating project demands a set of knowledge that might take place simultaneously or in succession, which the faculty is accountable for developing, motivated by academic directors and the intervention of parents and community members.

Likewise, this system becomes an integrating unit in which teaching, research and actual practice are basic elements of the educational process: a combination of practice and theory takes place. This guarantees a comprehensive and permanent exercise, developed from the curriculum towards the classroom, containing possibly diverse research lines focused towards pedagogical innovation, integrating teaching and research based on an identification of transformation targets and learning processes and creating bonds between the institution, students, teacher, family and the social context's reality.

Alongside the comprehensive project's evaluation, the final learning result includes a reflection process of the proposed objectives, taking into account qualitative thinking, theoretical initiative, creativity of diverse situations in participation

scenarios and meaningful constructions of cultural content through cooperation and interaction of teachers, classmates and members of the school community.

Methodological Fundamentals

This research is qualitative, it is based on the action research method (AR) because it is motivated by inquiries and not by the ambition of demonstrating truths; it is not driven by certainty either, but by the concern to build meaning regarding reality, allowing its participants to act reflexively and collectively on their problems (in which educational processes have the transcendental function of human transformation). In that sense, AR is a collective form of introspective inquiry aimed at improving the rationality and justice of its social or educational practices, as well as at understanding said practices and the institutions in which they take place (Kemmis and McTaggart, 1992).

From this perspective, Perez (1994) affirms that qualitative research is considered to be “an active, systematic and rigorous process of guided inquiry, in which decisions are made regarding what may be inquired, to the extent that it is included in the field of study” (p. 46).

The term action research was first mentioned by author Kurt Lewin (1944), he described a research method that could link the experimental approach of social sciences with social action programs in order to provide answers to the main social problems of that moment through action research, arguing that theoretical progress

and social change could simultaneously take place (Kemmis and McTaggart, 1992).

Action research's main representative (from an interpretative approach) defines it as a study of the social situation in order to enhance the action's quality in the situation. It is understood as a reflection on human actions and social situations experimented by the faculty, with the objective of expanding teachers' understanding regarding practical problems. The actions are focused towards modifying the situation, following an in-depth understanding of the problems (Elliott, 1993).

To this regard, Stenhouse (1984) proposes integrating the roles of researcher, observer and master in the teacher, as long as the teacher is clear on the fact that he/she performs the researcher role to positively impact his/her teaching and improve his/her practices, in humanistic scenarios.

Based on the aforementioned concept conventions, it is assumed that action research is a research type and method that consciously and decidedly involves its actors, transforming them into subjects and objects of the process with a participative and transformative change attitude.

For its part, qualitative approach as systematic activity oriented towards an in-depth understanding of educational and social phenomena enables inquiring, delving into and describing from a school practice (Sandin, 2003).

What are the interrelations between the Teaching for Understanding pedagogical model and the class projects in the educational community within the action research framework?

Consequently, research analysis demanded elements and traits of the stages to be identified. To this regard, Le Compte (1992) mentions that qualitative research extracts descriptions based on observations that adopt forms of interviews, discussion groups, accounts, field journals, audio and video transcriptions and all types of written records.

Methodological Design

The Continuous Evaluation and Learning Commission (CAEC, in Spanish) was integrated with members of the group of teachers that work in Vision Mundial school, it was made up by 8 teachers as a cyclical process to the research on individual and collective problems, pedagogical planning and practice, and continuous reflection and evaluation.

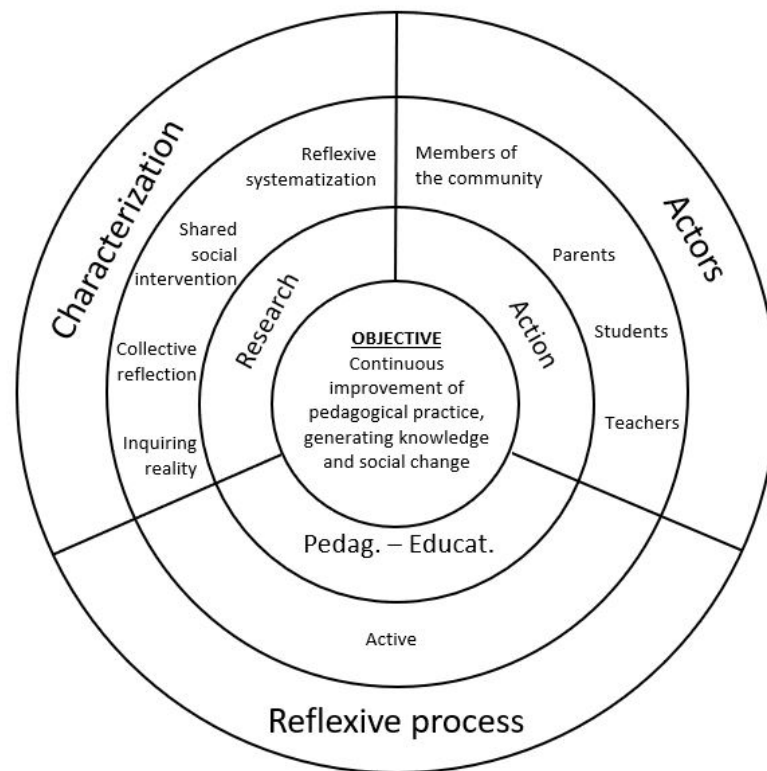
In that sense, the design of this research was based on pedagogical and educational development, using an active and participative reflection process, with the objective of achieving continuous improvement within the pedagogical practice aimed at generating knowledge and social change.

The subsequent scheme synthesizes the methodological design's operationalization, it starts with a characterization of the inquiry on reality regarding

common problems affecting the educational community. Next, experiences are systematized. And finally, achieved transformations are evaluated to move on to a new cycle in which the educational community's actors intervene. In this case, the education's quality is connected to the research, and contextualizing it, teachers reflect on their own practice, transforming it with the intention to design and apply new strategies and stages aimed at improving their accomplishments.

Interviews, discussion groups, accounts, field journals, audio and video transcriptions and all types of written records (including observations) were used in data collection. This action research view of school processes proposes a cyclical reflection-action-reflection model, in which the relation between knowing and doing, subject and object is reorganized, configuring and consolidating the parties' capacity to self-manage: it is an open and procedural research context (Kirchner, 2004; Bru and Basagoiti, 2002).

Figure 1. Design of the application of the action research method.



Source: compiled by the authors.

The Atlas Ti computer tool was used to analyze the collected data and reports, which were simultaneously coded and analyzed to develop concepts. Likewise, some syntax rules established by the program as well as the researchers' parameters were followed. An analysis matrix was designed with the categories, traits, descriptors, micro-texts of interviews and comments to relate, understand, compare and contrast the findings.

In that sense, Kaplan (1979) states that exercising creative imagination is the only possible way to arrive to a good theory, since forming a theory does not consist in

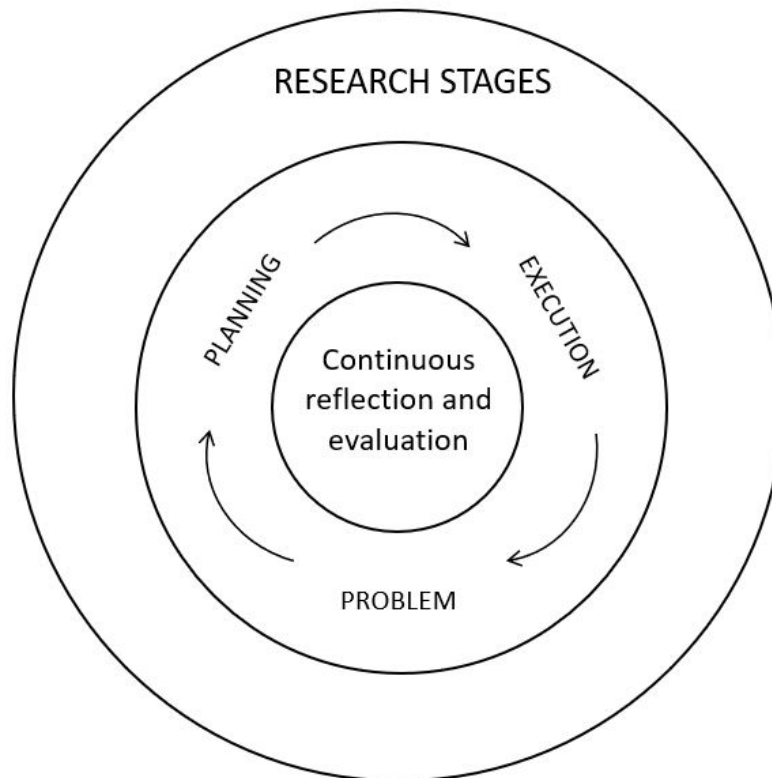
discovering or uncovering a hidden fact; it is a way to look at facts, organize them and conceptually represent them in a new relation network between its parties.

Research Stages

The research stages comprise diagnosis, construction on action plans, execution of plans, continuous reflection and evaluation. The parties involved are allowed to rescale, redirect or reconsider new actions and are given the opportunity to build knowledge. Lewin calls these reflexive action cycles: planning, action and action evaluation. Kemmis (1992) includes them in four interrelated moments as planning, action, observation and reflection. For Perez Serrano (1998) these are steps or stages to approach active research methodology: beginning with the diagnosis of a topic concern or problem; followed by the action plan, the implementation of the plan and its observation, as well as reflection, interpretation of results and planning again, if necessary.

The following scheme represents the research stages assumed by the researchers, permeated by a cyclical reflection and continuous evaluation dynamic, in order to make progress with the understanding and actions towards more and more advanced levels that result in knowledge.

Figure 2. Model of the action research method assumed in experience.



Source: compiled by the authors.

David Perkins (1997) specifies that when a teacher acts reflexively, he/she influences students' learning. Therefore, the teacher must take into account that continuous reflection and evaluation do not need a number of necessary cycles. Consequently, time constitutes one of the essential factors for the research to consider in changing, transforming and building knowledge.

The research stages in this project were as follows:

First Stage: The Problem

This stage began with the identification of the problem, going deeper in the understanding (diagnosis), reflection and interpretation of what was happening from the point of view of the people acting and interacting with the situation. Thus, the Continuous Evaluation and Learning Commission was constituted and consolidated along with its respective functions and commitments. This group permanently studied and reflected on the practices to build and enhance pedagogical processes, achieve transformation and knowledge of pedagogical practices through interaction.

Second Stage: Planning

Having reflected on the problem, a theoretical stance was adopted with the objective of understanding the problem. Researchers and CAEC members formulated the research's questions and objectives system, building a plan that included the review of the diagnosis and its findings; they also proposed a set of actions to tackle the situations found. Likewise, it could be a reconstruction of the strategy. Having identified the deficiencies, it was possible to design a new practice, therefore, teachers redesigned the planning using a more effective practice related with process validation. The following were also planned: schedule, results indicators, owners, evidence backed by verification sources, and budget.

Third Stage: Execution

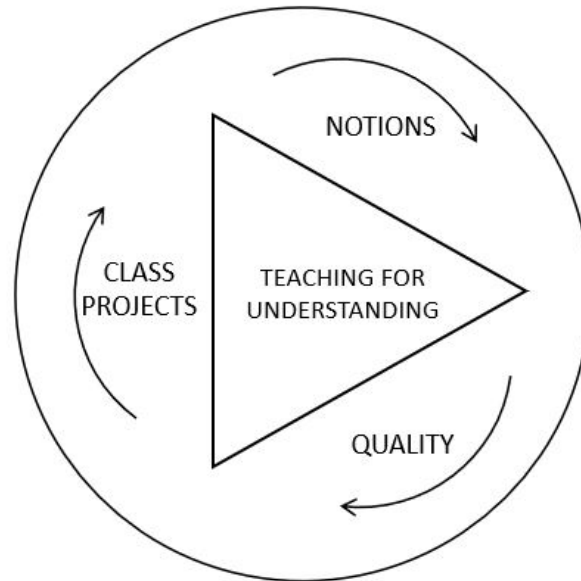
What happened was interpreted considering observation, information flow and care-free dialogue. Practice records assured completion of the activities in the established times; follow-up allowed continuous reflection and evaluation, practice effectiveness validation and moving on to the next cycles, if necessary. All of the stages were monitored, confirming indicators and objectives' effectiveness.

Definition of the Categories

No categories were previously established in the research. These arose from the identification of the problem and the formulation of the objectives, through the participation of actors, observation, free dialogue, written records, accounts and field journals.

The categorization system that was built complies with the characteristics of the categories proposed by Rodriguez, Gil and Garcia (1996), namely: differentiated data units are included in a single category, ordered and classified; they are clear for each relevant encoder in terms of the study's objectives and adequate to the analyzed content.

Figure 3. Design of analysis categories.



Source: compiled by

the authors.

Classroom

didactic strategies with the objective of identifying teaching and learning alternatives through the interaction of the teacher, students and content. In this regard, Sayago Z (2003) argues that classroom projects trigger processes based on inquiring and problem identification in an entertaining way, driven by students and by the teacher's activity proposals.

Notions: according to the research, it is understood that a notion relates to the person's point of view. For Van Driel (2007), a didactic proposal combines context-focused educational notions aimed at developing students' skills and attitudes. Consequently, we learn by doing and practicing (Fernandez, Portela, Gonzalez and Elortegui, 2001). Thus, teaching takes into account students' previous notions, interests and needs, connecting their knowledge with their daily lives, resulting in the encouragement of skill development.

Projects:

Educational Quality: an education of quality is understood as that which shapes better humans, citizens with ethical values, respectful of what is public, who abide by human rights, follow their duties and peacefully coexist. An education that generates legitimate progress and prosperity opportunities for citizens and the country. According to Graells (2002), quality in education assures that every student acquires knowledge, capacities, abilities and attitudes that are necessary in life.

Based on the aforementioned, a system of objectives and conceptual categories was developed, aimed at thoroughly detailing their relation and scope with the research herein.

Table 1. System of objectives and conceptual categories.

QUESTIONS AND OBJECTIVES		CONCEPTUAL CATEGORIES		
SUB-QUESTIONS	SPECIFIC OBJECTIVES	CATEGORIES	TRAITS	DESCRIPTORS
What ideas do teachers, students and parents of the Vision Mundial school have regarding the teaching and learning practices in the Teaching for Understanding pedagogical model as the axis of action research?	Understanding the ideas of teachers, students and parents of the Vision Mundial school regarding the teaching and learning practices in the Teaching for Understanding pedagogical model.	NOTIONS	Teachers, students and parents' knowledge regarding the teaching and learning practices in the Teaching for Understanding pedagogical model.	<p>Ideas about the Teaching for Understanding model.</p> <p>Ideas about classroom projects.</p> <p>Ideas about the teaching and learning practices.</p>

<p>What is the impact of classroom projects as an integrating didactic strategy to invigorate teaching and learning processes?</p>	<p>Analyzing the impact of classroom projects as an integrating didactic strategy to invigorate teaching and learning processes.</p>	<p>CLASS PROJECTS</p>	<p>Significance of Project-Based teaching in educational practices.</p>	<p>Innovative class methodologies. Integrating didactic strategies. Inclusive and transforming educational practices.</p>
<p>What valuations are worthy of classroom projects in terms of the academic, personal and sociocultural development of members of the educational community?</p>	<p>Valuating classroom project's results in terms of the academic, personal and sociocultural development of members of the educational community.</p>	<p>QUALITY</p>	<p>Academic, social and personal contributions.</p>	<p>Impact on the educational community. Practice of institutional values. Social transformation. Satisfactory academic results.</p>

Source: compiled by the authors.

Results

Research results agreed with the specific objectives and with the research stages defined in the methodology, providing a reflexive view of teachers' experiences.

The term experience refers to the teachers' didactic practices applying the Teaching for Understanding educational model and the classroom projects.

Collectively and collaboratively, the teachers at Vision Mundial school consolidated the Continuous Evaluation and Learning Commission, with the objective of inquiring, exploring, reflecting and creatively organizing learning circles and acquire novel knowledge. Likewise, different shared commitments were defined in order to

conduct the research. In this case, the members of the Commission bonded in interaction and acknowledgement, inquiries and questionings arose regarding classroom projects, Teaching for Understanding educational model, teachers' practices and educational quality, which are common problems in the teaching-learning process. The problem was identified, analyzed and developed, taking into account ideas exposed and different proposals in accordance with previously unified conceptual criteria.

Accordingly, the Continuous Evaluation and Learning Commission provided pedagogic contributions and became a conciliatory unit in which teaching, research and actual practice were basic elements of the action research process; it focused on classroom and school context observation and on real and spontaneous practices, conducting fieldwork as the researcher teacher collected information under his dual role as observed and observant subject to understand and transform reality.

Similarly, fieldwork, observation and written records of the events observed served as instruments to collect information of the exploratory experience, resulting in important descriptions that allowed each teacher to freely record intersubjective manifestations of subjects in their real contexts, assuming a critical and self-critical attitude derived from theoretical and conceptual inquiries aimed at transforming, innovating, continuously reflecting and evaluating, intellectual production and proposal design to improve teaching practices. In that regard, Briones (2000)

states that the teacher directly commits with the research as a function of his/her task as an educator, following these articulating axes:

Reflexive with action research incorporated into his/her daily practice, with the capacity to develop theory out of his/her action activities and tests, generating innovation between action and theory in different cycles. For Carr and Kemmis (1986), "research-action cycles, this virtuous circle turns practice in a creative circle of reflection, analyzing each part of the action as a whole" (p. 197).

Participative in the research with a leading and developer role in a collaboration project with iteration capacities. Classroom and school's reality are built by those who integrate it. Iteration is understood as invigoration, feedback and transformation, the cyclical process (continuous reflection-evaluation) that incorporates the development of educational values and principles into the reflection.

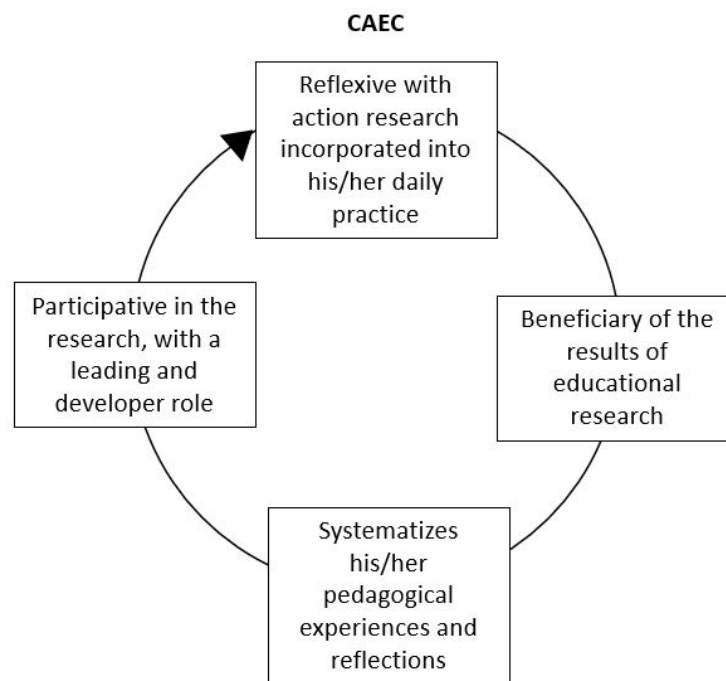
Beneficiary of the results of educational research, with the capacity to build and transform part of the reality, with the possibility of developing strategies to interpret and reflect on the practice. Gathers the points of view of others, besides his/her own. Confronts different outlooks about the same situation and uses differences as a starting point for the development of a theory of the practice.

Systematizes his/her pedagogical experiences and reflections, with the capacity of academic production, generating changes in didactic and training

practices needed and aimed at educational quality, assumes it as a research and development center of diverse forms of human subjectivity (Rodríguez, 2000).

The following scheme illustrates the design of the articulating axes of the CAEC.

Figure 3. Design of the articulating axes of the CAEC.



Source: compiled by the authors.

Notions, classroom projects and educational quality of the teaching practice had a direct relation between teachers' training, students' achievements and family's incidence, however, they were considered to be determined by the social context.

Reflections provided by the teachers admitted classroom projects strengthen innovation in the classroom, build alternatives for meaningful and pertinent learning, analyzing students' contexts.

Some students value the educational practices and academic guidelines developed in the institution, highlighting the interest and motivation that is constantly promoted in the classroom. Overall, it is evident that students fail to recognize the Teaching for Understanding model from its theoretical and pedagogical dimensions, but that they do value their teachers' praxis.

The school has motivated and allowed the integration of parents, mothers and guardians into educational action. A preponderant participation of parents in the teaching-learning process is even visualized, ratifying the fact that family is the natural environment for child development.

Conclusions

Educational research as knowledge builder enabler shifts into an instrument to discover the school's complex world. Research as the foundation of teaching and training allows the teacher to build knowledge (from his/her reflection), however, as professor Porlan (1995) said, only the reflection that incorporates ideological criticism (citing Carr and Kemmis, 1986) may reveal the educators' ideological illusions to help preserve a social order that is foreign to their collective experiences and needs. The investigative exercise may direct real transformation

processes, not just of pedagogical practices but of social practices within school, favoring the democratization of knowledge and mitigating the effects of social inequality.

Thus, the research herein helped increase the critical reflection of the Teaching for Understanding pedagogical model; to observe group and individual progress in didactic strategy implementation; to formulate, plan, execute and systematize classroom projects and research incubators; and the educational quality displayed by the students' academic results and the educational community's impact, changes and transformations.

Academic processes begin from the Teaching for Understanding pedagogical model, this student-centered model acknowledges students as subjects with their own voice, consciousness and, above all, intelligence; in this shift, the sense of training is placed on the student's skills and competences development as a bet to reconstruct what is human in the complexity of what is social.

Consequently, classroom projects as didactic tools are a bet to streamline teaching-learning processes, designing and implementing actions to stimulate students' achievements, which become essential mechanisms of continuous improvement.

With the orientation of teachers, students may identify strong and weak points in their life skills' development and thus take part of the continuous improvement and classroom evaluation processes. Likewise, classroom projects open

communication channels between members of the educational community (teachers, directors, students, families) and offer common educational goals concerning comprehensive training and acquisition of necessary competencies to successfully perform in society.

On the other hand, parents are informed about the quality of their children's education and are given the possibility to analyze and contribute to the improvement of their children's performance (and of the institutions') compared to expectations. They also start interacting with the activities organized by teachers.

After conducting the research project, teachers identified the importance of integrating reflection into the educational practice. Action research is not just an individual exercise, it is part of the complex interactions that take place among teachers, parents, social context and peers within educational environments. For Sacristan and Perez Gomez (1992) it means to rescue those existing distances as means to understand pedagogical processes and, above all, changes and transformations of school practices and the impact and transformation of the social context (facing educational quality problems).

It is also interesting to demonstrate that education of quality for populations in conditions of poverty is not only necessary but possible, regardless of the fact that the resources allocated by the State are the same or less than those allocated to any public educational institution, decreasing the persistent stratification of the local educational system.

Hence, to maintain and enrich this quality, it is necessary to increase the support given to education and pedagogy research. Permanent, systematic and institutional efforts are required regarding education research, aimed at consolidating a community and a strategic thinking on the topic, to achieve extensive socialization in Colombian society regarding knowledge appropriation and its translation to the public policy field and the sphere of institutional policies of entities involved in the education system.

Finally, taking into account the conceptual references, the impact of the Teaching for Understanding model and Project-Based learning is evident in the educational scenarios of students' learning processes, acknowledging the role of the school and teachers in consolidating capable subjects, with their own opinion and vote, able to make decisions that are consequent with society's dynamics. Likewise, the social and ethical transformation led by the school and its families is reiterated, which is reflected in the behavior and aspirations of their children.

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