

Pedagogical Research in the Practicum at Universidad Nacional: EFL Pre-Service Teachers' Conceptions and Experiences

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This study took place at Universidad Nacional de Colombia in the Foreign Languages Department. Concerns coming from the area of pedagogy and teaching Practice guided our efforts to seek opportunities to uphold pedagogical research as an enriching component for the preparation of prospective teachers in EFL (English as a foreign language). Student teachers, who had studied the basis of pedagogical research, planned and implemented projects to solve problematic situations along their practicum. After analyzing participants' testimonies, results provided valuable information in relation to the conceptions student teachers held towards research as well as the professional attitudes they seemed to develop. Likewise, this study evidences how conducting research posed several challenges for these future teachers.

Key words: Pedagogical research, foreign language classroom, pre-service teachers' preparation, teaching practicum

Este estudio se llevó a cabo en el Departamento de Lenguas Extranjeras de la Universidad Nacional de Colombia. Inquietudes surgidas de las áreas de pedagogía y práctica docente nos motivaron a buscar oportunidades para hacer de la investigación pedagógica en la enseñanza y el aprendizaje del inglés como lengua extranjera un componente enriquecedor en la preparación de futuros docentes. Estudiantes practicantes que conocían las bases de la investigación pedagógica, planearon e implementaron proyectos para resolver situaciones problemáticas a lo largo de su práctica. Después de analizar los testimonios de los participantes, los resultados revelaron información importante respecto a la forma como los futuros docentes concebían la investigación y las actitudes profesionales que éstos parecían adoptar. Además, este estudio proporciona datos relacionados con los retos asumidos por estos futuros profesores al involucrarse en investigación.

Palabras Clave: Investigación pedagógica, salón de lenguas extranjeras, preparación de estudiantes-profesores, práctica docente

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1. Introduction

Providing EFL pre-service teachers with suitable means to face the current challenges of our profession has shaped the interest of a good number of higher institutions in our country. Thus, the search for initial teaching experiences, which can make a substantial impact in the preparation of prospective teachers, has led many of us teacher educators to join a world tendency in incorporating reflective and critical approaches to carry out our job. Encouraging pre-service teachers to research during their initial practice has precisely emerged as one of those options for reflective practice and a growing number of universities are following this path. The foreign Languages Department at Universidad Nacional has recently joined this national and world tendency.

Following the recommendations from the COFE Project, and those of Jimenez et al. (1993) to universities in charge of preparing future teachers in our country along with Universidad Nacional's (1999–2003) Plan de Desarrollo called "Liderazgo por Resultados" as well as our general law of education (LEY 115) in its article 109 (three documents which emphasize teachers' involvement in research as a growing need to improve their professional practice), we undertook the study described along this article.

Bearing the previous data in mind, a first objective of this study was to inform the Licenciatura Program in our university as well as similar ones in our country in relation to what the preparation of future teacher-researchers might imply. In order to provide a clear path in reaching this goal, the following two related questions were posed:

How did a group of student teachers experience pedagogical research through their practicum?

What perceptions did they reveal about conducting it?

Answering this question was also connected with a second objective: to contribute to initiating a process to integrate various areas of the Licenciatura program such as the pedagogical component in ELT methodology courses (didactics), teaching practice courses and the research component (monograph seminars). Constant feedback from students in our program, especially during their practicum, has made us aware of their difficulties to articulate pedagogical theory with their reality in classrooms, which got them to see themselves as not having the appropriate skills to succeed. Consequently, we expected that connecting curricular components through investigation could guide participants' construction of solid knowledge to act in a changing world.

This article will continue with a review of literature which describes the efforts that Colombian universities in charge of preparing foreign language teachers as well as institutions in other countries have made to involve pre-service teachers in research during their programs. Then, the specific process designed to involve student teachers in research will be explained. After that, the methodological aspects and results of the study will be shared. Finally, conclusions and implications will be discussed.

2. The Introduction of Pedagogical Research for Pre-Service Teachers' Preparation in Universities: A Review of Experiences

The gains that teachers can obtain from their involvement in research as a constant activity in their professional life have been widely discussed. Elliot (1990, p. 11) regards research as a practice which “positions teachers beyond the technicalities of their jobs; teaching stops being a mechanical action to become meaningful practice”. Educators’ possibility to reflect upon their practices is located at the heart of what empowers them by means of action or classroom research to think and act improving theirs and others’ conditions. Wallace (1988) and Hubbard & Power (1999) underline the reflective nature of research practices in teachers.

Looking at publications in the area of ELT (English Language Teaching) in Colombia, we see it has been possible to gather information about the studies conducted in three universities to explore student teachers’ involvement in research. The studies have examined the introduction of the research component at various points of the Licenciatura programs.

Universidad de Caldas

Two studies have been conducted at Universidad de Caldas. The first one was reported in two publications: Gallego et al. (2001) and Quintero et al. (2003). The second one was directed by Lopez & Zuluaga (2005). Both studies have taken place in the Licenciatura en Lenguas Modernas seeking to lead future teachers in integrating their teaching work with research during their teaching practicum. Thus, it was expected that student teachers could achieve a better preparation to face the challenges in their new situations. By means of a working paradigm rooted in action research, the authors of these studies could perceive favorable results. They reported that student teachers looked deeply inside their teaching practice which fostered their understanding and awareness at the time to make decisions in planning and implementing various curricular components. Furthermore, their results suggest that student teachers’ use of research in their pedagogical work fostered a more solid integration with their students and the

institutions in which they worked. Finally, it seemed that the participants improved their language proficiency, especially in relation to reading and writing skills.

Universidad del Valle

Cárdenas and Faustino (2003) described a project they conducted at Universidad del Valle to “design, plan and implement the classroom research component of the Licenciatura Program” (p. 23). Their project aimed at involving students from first to tenth semesters in typical research activities as keeping diaries, observing classes, analyzing data, among others. As the research preparation cycle strengthened, students were expected to develop enough skills to carry out research projects in schools. The evaluation of this experience informed authors that pre-service students gained more analytical skills about their learning process and their context; thus, they became more reflective and felt more equipped to undertake their final monograph work. Difficulties were also part of this experience. Many of them dealt with logistic aspects which are hard to control; for instance, irregular situations in the functioning of the university, time constraints in working schedules and difficulties in matching times with schools. Likewise, establishing relations with schools seemed a strong limitation for the project.

Universidad de Antioquia

A group of professors and pre-service teachers in the Undergraduate Foreign Language Program participated in the evaluation of the action-research component integrated in the curriculum. McNulty & Usma (2005) describe this curricular innovation, the research skills pre-service teachers developed as well as the attitudes that prospective teachers, along with their professors, revealed during this process. Researchers’ findings focused on the skills that pre-service teachers were able to develop such as exercising reflective practices by means of diary writing and class discussions and gaining expertise in data gathering through observation and elicitation techniques, among other skills. Furthermore, a general positive attitude towards the use of research as a means to improve one’s professional practice was identified. Though the previous achievements seemed favorable for many of the participants, others reported their experiences of limitation while engaged in these practices. They informed that the lack of integration among several courses and professors did not contribute to providing a solid sequence for the achievement of specific objectives. Likewise, in some cases, professors’ job conditions as well as their preparation constrained expected outcomes.

Universities around the World

Russell (2000) reports on a study conducted at Queen's University in Ontario. He examined the effect that the action research component in a teacher education program for pre-services teachers had in their preparation during their early extended practicum. Data collected along two years revealed that participants increased their skills to solve problems. Taking notes of their thoughts enabled them to look deeper into the situations of their classrooms, had clarity about their teaching actions and self-assessed their progress which had a long term value in improving their teaching abilities. Moreover, the reading of research helped them to keep a critical view on their possibilities to improve the education system and they understood the value of writing a report. Nevertheless, student teachers' expressed their having difficulties with this type of research because of its subjective and qualitative nature, as well as the extra efforts and skills that beginner teachers might feel they did not have.

Smith & Coldron (2000), from Shelffield University in England, examined the way pre-service teachers' participation in research related to their views about their practice. They studied two cohorts of prospective teachers who were in the second of three years in a Bachelor of Arts degree programme. They identified as gains for their student teachers the adoption of a more critical position towards their own practices and assumptions; they seemed to look at different perspectives in the relation they saw between theory and practice. These pre-service teachers increased their confidence since their ideas were confirmed by authorities (known researchers they read) and they grew in the collaborative groups where they analyzed texts, questioned and became more rigorous in their practice. Participants also assumed several roles in relation to their students because of their double profile as teacher-researchers.

Tercanlioglu (2004), by means of questionnaires, carried out an investigation to identify pre-service students' attitudes towards research and the instruction they received to conduct it. One hundred, seventy-three EFL pre-service teachers during their third and fourth years of studies in a Turkish university participated. The results indicate that though most of the surveyed students considered research a necessary activity in the job of teachers, they believed it was hard to carry it out. As negative issues, they also perceived that their professors did not seem committed to work in research themselves so their guides' research findings were not discussed in lessons or put into practice in real life settings. Despite the previous shortcomings, they regarded understanding research procedures and terminology in their area of study as feasible aspects to achieve.

The connections that 11 pre-service teachers established among pedagogy and research and change while they took an action research course, was the focus of a study conducted by Price (2001) at

the University of Maryland. What this researcher concluded was that participants' intentions to develop specific actions in their classrooms seemed to become more possible and feasible because of the opportunity action research provided them. A systematic and detailed look at their teaching led these pre-service teachers to transform their comprehension of how they taught. Action research provided participants with the occasion to relate the topics they taught to their own realities, which expanded their chances for cognitive, social and cultural development. A limitation perceived by these prospective teachers was that they did not observe concrete changes in their students' lives as they noticed changes in their own.

3. Supporting and Investigating Student Teachers' Experience as Researchers at Universidad Nacional

After reviewing the findings obtained by professors-researchers in several universities, we will address in this article the research developed at Universidad Nacional. A chronological account will be followed to explain how the study was conducted over two semesters. Each semester corresponds to a stage, and relevant aspects in the implementation of each part will be described.

3.1 First Phase

During the first semester, the study had as its focus the Didactics II course (ELT Methodology) in the Licenciatura Program (Philology and Languages). Thus, students studied issues related to curriculum and syllabus design, evaluation, lesson planning and the teaching and learning of language skills and components. I was the professor who guided this course at that time and I worked as one of the two researchers in this study. I also guided student teachers in their practicum and in a monograph seminar for the teaching of English to children.

The first phase included 65 students who took the Didactics II course. Most of them were in their seventh semester and they would enroll in their practicum the next term. Some of them were also attending monograph seminars in areas related to classroom research, teaching English to children, and linguistics and literature. Along the Didactics II course, a series of actions were carried out to fulfill a main objective for the first phase: to prepare students as much as possible in their development of research skills so they could incorporate a research project in their teaching practicum.

The first action taken was to inform students about the study, its purposes, methodology and operation. Secondly, by means of readings, lectures and discussions, students were in contact with basic concepts in educational research. Theory about research approaches, procedures and instruments for

data collection was integrated in their ELT Methodology course. The previous actions provided students with initial tools to undertake classroom observation in their visits to schools at the end of their Didactics II course. As non-participatory researchers, students went to schools in order to detect possible issues of their interest. At the end of this stage, the constant reflection of students on research, teaching and learning, the theoretical principles reviewed and their exploration of school contexts had fed the proposals that students planned to conduct by means of their research projects during their practicum.

Pre-service teachers kept journals along the whole course in order to write about their experiences as they were learning about theory for research. Later on, they would also record in their journals notes about their visit to primary and secondary education institutions and their observation process. The reflection of participants through this instrument was enhanced from possible questions they could use to write about.

While the first phase took place, journals along with questionnaires also helped us to explore student teachers' opinions in regard to the roles that English teachers assumed in their pedagogical practices. Additionally, there was an exploration of student teachers' views of research at that point and how they perceived themselves as future teachers during their practicum. These initial views informed the study as a reference point for further analysis in the second stage.

The analysis of journals revealed that at the end of the first phase, participants considered the following roles of English teachers as the most relevant: a supporter of communicative competence in students, a motivator, a friend, a guide and a diagnostician. It could be concluded that, at this point, students did not view the role of researcher as fully integrated to the role of teacher. Probably the most connected feature to that of an investigator was the one of diagnostician.

In relation to pedagogical research, students perceived this practice as a challenge; for them, it seemed a complex task. They also considered it to be beneficial as a tool for reflection and change and also as a possibility to connect teaching with the whole context of the pedagogical practice. The previous answers apparently evidenced the existence of positive views in regard to participants' conception of pedagogical research in teaching.

Turning to questionnaires, all student teachers attending the Didactics II course were invited to answer the questionnaire, but only 25 of them returned it. The five roles they mentioned as the most likely to be fulfilled during their teaching practice were those of guide, friend, motivator, facilitator and,

the last one, researcher. At this point of the study, this data seemed to indicate that students had started to consider their role as researchers as a possibility, although taking into account the analysis of journals, it did not seem a priority.

3.2 Second Phase

In this new phase, though the study involved all students registered for the teaching practice, only 18 were taken into account as participants. The students selected were the ones who had taken Didactics II the previous semester or the ones who were going to conduct research projects originating from monograph seminars since our purpose was to examine the process of those with previous knowledge on pedagogical research. From this seminar, student teachers had been involved in action research and, in general, classroom research approaches. In this sense, and in regard to what was mentioned in phase one, qualitative research in the educational context framed the general approach these pre-service teachers would apply along their practicum.

Participants were in their eighth semester of studies. They were 10 women and 8 men. Most student teachers said they had not had any previous teaching experience. A couple of them had worked for a short time in institutions teaching adults and two more had worked in schools from a semester to a year.

The other group of people involved in the second phase was the teaching practice advisors. On average, each group of five student-teachers had an advisor. Six professors from the total team were the ones in charge of supporting the pre-service teachers who participated in the study. Most of these professors held masters' degrees in areas related to the teaching of English. In addition to their contribution to pre-service teachers' practicum, they also taught other classes in the program on issues such as didactics, research and English.

The teaching practice experience lasted one semester and student teachers taught their pupils for four hours a week. Additionally, they held meetings with advisors, professors from the university and other peers in order to be supported in their preparation. Generally, each advisor arranged his/her work with his/her group of student teachers according to his/her style.

During the second semester in which the study took place, participants enrolled for their teaching practice in two institutions. The first one, "Instituto Pedagógico Arturo Ramírez Montúfar" (IPARM), is located inside the university campus. In this institution, student teachers could develop their teaching practice either in pre-school, primary or secondary school sections. However, English had been traditionally taught in secondary and had been part of the English curriculum only for five or four

years in primary and two in pre-school. That's why the school was in need of setting the basis for a solid curriculum in this area.

The second institution was the Institución Educativa Distrital (IED) "Manuela Beltrán" located in Universidad Nacional area. This institution taught only primary school levels. English teaching in this school had started a year before. Many of the children had their first experiences in learning English with student teachers from Universidad Nacional since the teachers in this institution had not been prepared to teach the language.

Along the second phase of the study, student-teachers not only followed their research agenda, but also kept involved in lectures and workshops to strengthen their investigative skills. Prospective teachers attended a seminar on teacher research which included information to update them on the theory and practice in this field. Furthermore, advisors and researchers in the study were expected to provide student-teachers with specific guidance to work in their research projects.

Data Collection Procedures, Techniques and Instruments

Principles and procedures from qualitative research, as defined by De Tezanos (1998); Larssen-Freeman (1993); and Nunan (1993), were used to plan and implement this study. From an initial reflection to pose the research questions to the data analysis collection, an organized process was conducted to observe and, so, describe the dynamic nature of student teachers' involvement in pedagogical research. The intention was to focus on the meaning we could draw from participants and their situation as a natural context. Appropriate instruments were chosen to capture our participants' perspective of the phenomena being studied. The following lines revealed which instruments were employed and how they were applied.

Surveys

While participants developed their research projects in institutions, data were collected to answer our guiding questions. At the beginning of the term, student teachers were asked to answer a survey, based on Bell (1999) and Dornyei (2003). Twenty two of them returned the questionnaires. The purpose of this survey was to explore participants' interests in developing their projects along their teaching practice, the nature of their projects and their plans to carry them out as well as socialize them. Data were also collected from practicum counselors at this point. They voluntarily accepted to support the study and similarly to support student teachers. Student teachers and counselors gave their written consent for information to be used in the development of this study. Student teachers' advisors also

answered a survey to provide information about their tutees in the teaching practice for this term. They informed in regard to their tutees' plans to carry out their projects and the kind of support student teachers might need to implement their plans.

Interviews

Along the teaching practicum term, pre-service teachers, as well as their advisors, participated in two semi-structured interviews, based on Seliger & Shohamy (1989) and Nunan (1993). The questions used in these interviews were piloted.

The first one took place when the semester started. Seventeen student teachers and six of their advisors provided answers. These questions sought to explore participants' expectations in regard to their implementation of research projects, their perceptions about their research skills, and the connections they saw between pedagogy and research. The second interview was conducted by the end of the term. Thirteen pre-service teachers and five counselors answered the questions. We basically inquired about participants' research process and views as they implemented their projects in their practicum. In order to gain better insights of participants' comments, all the interviews were audio-recorded and transcribed.

Students' Artifacts

At the end of their teaching practice, prospective teachers were asked to write a descriptive report on the implementation of their projects, based on Hubbard & Power (1993). They turned in the reports on their own free will; that's why these papers' length and style varied according to the authors. Ten participants turned reports in. We suggested students include aspects in relation to the identification of their report: the name, institution and participants. They also commented on the specific concerns they wanted to tackle by means of their proposals: objectives, the problem or questions being addressed and the pedagogical strategies used. Another key component referred to their investigative framework: data collection, analysis procedures and instruments, as well as results, conclusions, strengths, limitations and suggestions for other student teachers.

When a significant amount of data had been collected, a simultaneous analysis was started. Coding and indexing procedures were used as suggested by Hubbard & Power (1993) to organize the information. Subsequently, principles from the grounded theory were followed, based on Strauss & Corbin (1990). These procedures "share commonalities with constructive, generative and illuminative analysis" (Huberman & Miles, 1994, p. 431). Consequently, common patterns were identified as

answers to our guiding research questions. These recurrent issues were confirmed by means of questioning, refinement and modification of the relations among them, which contributed to integrating them to form categories. Bearing in mind the main characteristics grouped in each category, suitable names were selected for these macro-pattern categories which are the topic of the next section.

The validity and reliability of the findings were taken into account in this study. Based on Cohen & Manion (1995), we provided for methodological triangulation since information gathered came from different instruments which allowed confirmation of results. Likewise, the two researchers analyzed data in a first instance on their own and, subsequently, along various sessions they confronted their results to once more organize information in search of answers for the questions. Seliger & Shohamy (1989, p. 185-186) called this process inter-rater reliability.

4. Findings of the Study

In the next section, findings unveil valuable information to understand how pre-service teachers started becoming involved in research. Based on the theory they had been exposed to during previous courses, participants had the chance to experience the challenge of researching while facing one of the most meaningful moments on their path to becoming teachers: their teaching practicum.

4.1 From Teacher to Teacher Researcher: Expanding One's Role in The EFL Classroom

Carrying out research projects in their teaching practicum provided student teachers with experiences which unleashed their questioning and reflection in regard to their roles as teacher researchers. A look at the changing nature of student teachers' perceptions about research in their pedagogical practice will set the grounds to show later on how investigating seemed to relate to their growth as teachers.

When students were asked which roles they considered the most relevant for a teacher to perform during their job in the Didactics II course, being a researcher did not emerge as one of the first options. Notwithstanding, this previous perception seemed to start changing as they became involved in research. One of our participants expressed the following:

“The research process was very interesting from Didactics, I did not know that teachers could conduct research. This was new for me. I had the idea that a teacher only transmitted knowledge. Having all this experience...the teacher's role changed. He is not any more someone who only induces to knowledge, he also investigates to improve in his job ...as a doctor or an engineer does”. (Ramiro, final report, lines 53-58)

This group of student teachers emphasized the need to revise their current conceptions about what being a teacher implied as a means to succeed in integrating the role of an educator with the role of a researcher. The exploration of students' perceptions at the beginning of the teaching practicum also revealed the existence of misleading beliefs and ideas. Another testimony can illustrate this point: *"I remember what professor Merced told us about classroom research...it is something that you imagined can only be done by specialized people from the Ministry of education..."* (Karina, interview 02, lines 11-13).

Data analysis revealed that research encouraged the expansion of student teachers' roles towards three dimensions: the development of professional qualifications and skills, a changing perspective to focus on critical teaching as well as learning issues, and finally the integration of knowledge and people who participated in these processes.

4.1.1 The development of professional qualifications and skills

Student teachers and their advisors emphasized the impact that reflection, curiosity and openness, as key elements in the nature of research, had on them. Consequently, they assumed a more inquiring attitude in regard to what happens in their context. Their self-evaluation and self-awareness of their actions also fueled the reflective attitude they evidenced. An advisor remarked: *"...Among these aspects they assumed, for example, I think they were more attentive to what happens in their classrooms...they started to solve difficulties on their own and tried to find answers to their problems."* (Juan, Interview 02, lines 6-10). In regard to the previous idea, the common features of a teacher as a professional in their area seemed to be fostered by certain characteristics which are specific in someone who devotes his/her time to research.

The aspects discussed by the advisor in the previous excerpt correspond to fundamental skills in researchers: observation and reflection to work with problems. Apparently, participants incorporated these skills in their teaching. Another advisor reported that one of the pre-service teachers who was working with her talked about how *"they felt the need of becoming researchers...of going beyond the course they taught and this led them to be more curious and creative"* (Marcela, Interview 02, lines 8-12)). Freeman (1998, p. 14) regards the following as a basic element for teachers' professional development:

When teachers start questioning in regard to what, how and why they do what they do and they pose questions and they speculate about possible answers, they integrate the self-questioning

element in their practice which leads them to understand better what is happening and could happen there

To close, a significant number of participants mentioned that along this experience they widened their meaning of what being responsible meant since investigation demanded more from themselves. They claimed that these aspects nourished their teaching in order to achieve knowledge building.

4. 1. 2 A changing perspective to focus on critical teaching and learning issues

Student teachers' concerns from the beginning to the end of their practicum seemed to change. When they faced the first instants of their practice, they spent most of their efforts in managerial issues such as the organization of the classroom and their time distribution, among others. As the practicum progressed and they became involved in their projects, they revealed a tendency to pay more attention to issues in connection to their students' circumstances inside the classroom.

From the previous perspective, a variety of new issues gained importance in these prospective teachers' agenda. A revealing event took place, for example, after the first four or five weeks of classes when several participants carried out a needs analysis and changed their initial projects. Then, these pre-service teachers decided to implement projects; among them were the following: the use of games as a tool to handle aggressive attitudes in third grade children; cooperative learning to improve social relations in fourth graders, an approach based on building values to strengthen responsibility in third grade students; and group work to build the society we dream of. As has been shown, pre-service teachers focused their interests on critical situations observed in the classrooms. A student teacher commented that

“...we believe that it is good to carry out this kind of research projects during our practicum since we are not only working as teachers, but also exploring and solving problematic issues that happened in classrooms. The practicum needs to integrate projects which make teaching meaningful and useful for education in our country” (Catalina, final report, lines 40-44).

This change in student teachers' views to focus their concerns might have been possible because of their constant and detailed observation of what happened in the classroom along with their openness to negotiate topics of interest with their pupils. Research allowed these future teachers to gain awareness about their students' reality.

In regard to the previous finding, Freeman (1998, p. 15) presents a similar view to the one which has emerged from this study: “pedagogical research means to rethink and to rebuild the social

organization of teaching in schools. The process of becoming involved in research also means to change the ways how schools work in what they have planned and teachers' job is valued".

4.1.3 The integration of knowledge and people closely related to student teachers' preparation

Taking part in research processes implied the establishment of connections among several people in the contexts where projects were designed. The information collected showed that interaction among various participants around the projects fostered communication to join efforts and, so, to achieve research objectives. This was the case of advisors for whom research became another issue to be discussed with pre-service teachers. These teacher educators were often surprised since student teachers who had not been assigned to work with them came to ask for help. One of them brought up the previous issue in these words:

“I think that the integration between the student teachers' work and the advisor was very important...this experience has shown the importance for us to believe in student teachers' capacity since the help we can provide them in this work is fundamental” (Juan, interview 02, lines 19-23).

Apparently integration was also perceived by participants in relation to how knowledge fields interrelated. Firstly, participants noticed a higher connection between Didactics II and the Teaching Practicum. In the case of those students who were taking monograph seminars, connection with the practicum was also observed. They found an ideal setting to implement their research projects.

Integrating research and pedagogical theory with practice emerged as another issue. For participants, having the chance to implement a project led them to become aware of the principles they had studied about investigation in a realistic way. Student teachers expressed that many times they went over their notes on how to prepare a survey or what to take into consideration for successful observation and put that information into practice.

The next comment from a counselor provides an illustration for this aspect “...*student teachers applied the theory about research in their real practice, they were able to connect that knowledge with their real practice*” ...” (Marcela, interview 02, lines 25-27)

Research also made it possible for student teachers to carry out the plans they had built from pedagogical theory learnt along the program. In regard to this, a participant remarks “...*during the English classes in fourth grade at the IPARM, this theory...cooperative leaning was implemented... and we collected enough data to answer our research questions*” (Sandra, final report, lines 8-10). Jiménez

(1991, p. 3) highlights the integrative nature of research stating that “a wide investigative view allows teachers to make closer connections between theoretical and practical issues”.

The previous paragraphs accounted for those instances in which research seemed to enrich pre-service teachers’ performance as teachers or to help create conditions for their pedagogical work to succeed. Notwithstanding, as will be shown, there were circumstances that pointed at constraints participants experienced to achieve their research objectives.

4. 2. Research: A Challenge for Teaching Practice

Though student teachers succeeded in implementing their projects, assuming an additional role as researchers implied for them facing difficulties which seemed to make them insecure about their pedagogical and professional skills. Three limiting aspects along this experience were recurrent topics in participants’ testimonies.

4.2.1 An embryonic research competence

At some points, student teachers revealed anxiety and disbelief about how skilful they might be to perform teaching and research tasks at the same time, as revealed in previous lines. Their background in pedagogical research consisted basically of a couple of theoretical courses or seminars they had attended. Along those subjects, they had only been involved in observation of classes and reflection practices. Consequently, when students saw themselves at a starting point, they did not have enough confidence in what they were doing. This conflict relates to what Stenhouse (1982, p. 39) points out as one of the common objections to the idea of the teacher as a researcher; he discusses the supposed limitation in theoretical knowledge that teachers have from the perspectives of researchers saying that “What teachers generally lack is confidence as well as experience to relate theory with planning and to conduct research work.”

The next testimony from a student teacher evidences how participants regarded their own competence to carry out research, a situation which constantly implied a critical point of reflection about their preparation and our support to keep them positive about their capacities. “ *I sometimes doubted about the right steps to follow while developing the research project...I had some doubts and I think there were things I did not know*” (Claudia, Interview, 02, lines, 17-19).

4.2.2 Logistics in the organization of the practicum

Usually, organizing the teaching practicum experience in the Foreign Languages Department at Universidad Nacional involves the coordination of actions developed by student teachers, teaching practicum advisors, cooperating teachers, heads of schools, students' parents and students. Similarly, the preparation of spaces, time-tables, materials and teaching as well as learning experiences, among other aspects, need to be considered. For student teachers, working under the previous circumstances posed a serious challenge.

To begin with, being committed enough to the demands of the teaching practicum limited the amount of time that student teachers could devote to their specific research agenda. A pre-service teacher who worked with a project based on multiple intelligences remarked: *"A problem was the lack of time to explore in depth the results, I mean to have a clear view of how intelligences were developed"* (Ramiro, final report, lines 90-93). Another comment reveals how time constraints had a negative influence on these prospective teachers' research agendas. One of them commented: *"On the other hand, the weaknesses of our project had to do mainly with the limitation of time that did not allow us to apply each strategy for a long period of time; not even, to try with other strategies..."* (Lina and Angela, final report, lines 11-13). The previous situation has been widely documented by researchers. Stenhouse (1982, p. 39) asserts that "the most serious constraint for teachers' development as researchers-and indeed as artists in teaching- is simple, the lack of time".

We as advisors tried to frame the teaching practicum within the particularities of the schools in which this practice took place. Thus, we considered the existing curriculum: subjects, contents, institutional activities and the school year agenda to guide prospective teachers' work. Among the classroom duties that pre-service teachers listed as taking most of their time and so reducing their periods for research were handling discipline, managing the classroom, getting to know students well enough and assuming administrative tasks in relation to curriculum planning (the most frequent). That implied a big load of work which in several opportunities made our participants feel skeptical about the feasibility of their projects.

4.2.3 The varying levels of support from different actors involved in the process

It was always known that a high degree of cooperation could lead this study to a successful development. Despite the tremendous efforts made to coordinate the study at different levels, data collected informed us that participants' commitment varied. Some teaching practicum advisors, for example, constantly supported their pupils whereas others decided to leave the responsibility in relation

to coaching in research to other circumstances. One of them commented the following when she was asked about possible suggestions she might have for pre-service teachers in their research roles. *“The truth is that I was not really aware about the implications of being a teacher-researcher...I was not the one who helped students about this; the ones who were expected to help them were Lilia and Jaime”* (Ana María, interview 02, lines 18-20).

In regard to the schools where participants developed their teaching practicum, it was established that the scarce support they received from the staff of these institutions affected their plans. There were cases in which schools, as mentioned by several participants in this study, did not back them up in the ways they expected; student teachers’ research agenda did not match cooperating teachers’ priorities, for example. In regard to this a prospective teacher explained:

“...it is a bit complicated because many times the institution does not provide you the space to work, many times our advisors and the cooperating teachers do not help us so our work is done...thus we could be autonomous inside the classroom (Daniela, Interview 02, lines 11-17).

So far, it has been illustrated how pre-service teachers thought research played a role in their teaching practice and how several factors defined how they acted while they implemented their projects in their classrooms. Despite the previous shortcomings during their implementation of research projects along their practicum, pre-service teachers seemed to progress in achieving specific objectives of their research projects. Although not all steps implied in the development of an investigation were followed, apparently particular stages were carried out as illustrated in the next section.

4.3 A sequence of steps to develop pedagogical research

Conducting a research proposal in connection with a pedagogical implementation generally requires systematic work to obtain solid results. From the literature explained and analyzed, along with previous initial reflective exercises, pre-service teachers were shown the importance of adopting a coherent research sequence to carry out their projects. Nevertheless, we could establish that participants did not always follow consistent steps during their process in their practicum. Apparently, as they faced their teaching realities, pre-service teachers prioritized and modified their knowledge about methodological procedures to develop their research project based on their circumstances and needs. Information gathered allowed us to reconstruct, up to some extent, the followings stages of the research process these prospective teachers engaged in.

4. 3.1 Planning a project

This moment gathers those actions that prospective teachers engaged in in order to search for and, henceforth, define the problem they would try to solve along their practicum. They started by exploring their teaching contexts. One of the participants stated *“a needs analysis was developed in the second (b) grade class. From these results, a deeper study took place”* (Ramiro, final report, lines 1-2).

Most student teachers took longer than we expected to carry out a diagnosis in their classrooms. Some participants involved their pupils in this process and talked with them about the ideas they had decided to implement to help with these problematic situations. Others thought it was not convenient to reveal their plans since students might feel reluctant to participate. Constant observation and reflection nourished student teachers' initial exploration and led them to adjust and consolidate their views about the problems being defined.

After this initial phase, pre-service teachers centered on limiting their research topics. Depending on their own interest, their findings in the needs analysis stage influenced their decisions. The previous process characterized what student teachers who enrolled in the teaching practice without a specific topic in mind did. Two other situations were identified when participants decided on adopting a specific topic or problem: the first one refers to those pre-service-teachers who explored the issues that they had detected as relevant during their visits to classrooms in Didactics II. Some of them kept their topic of interest making slight changes and others changed completely their focus probably because of what they learnt by means of their diagnosis. Second, student teachers who had established particular focuses from their monograph projects stuck to their plans.

4.3.2 Implementing and exploring pedagogical strategies in the classroom

According to their own working rhythms, each student teacher started the implementation phase of their project. They made decisions to adapt their projects taking into consideration the needs and demands of their teaching contexts. In this sense, the use of innovating pedagogical strategies, which often broke the predefined curricular sequence of institutions, was common. Participants mentioned in their reports and interviews their adaptation and design of resources as well as didactic techniques. Similarly, they sought opportunities to design a variety of curricular elements such as achievement indicators, syllabuses and school events coherent to their projects. The following excerpt reveals participants' views about their implementation process:

“...our biggest strength during the development of this study was the pedagogical procedure we implemented...after having applied four strategies during the development of the students' writing

project, we got interesting findings in the area of error treatment as well as in the process of writing in beginners” (Lina & Angela, final report, lines 14-19)

Lina and Angela’s final report not only informed about their pedagogical implementation, but showed us how their research agenda took place simultaneously with that teaching work. This stage of the inquiring process was not similar for all student teachers. It was possible to determine that most students gathered data by means of observation, which they recorded in journals. A particular case was the one in which student teachers had taken monograph seminars previously. They used more sophisticated methods such as interviews and field notes. That’s the case of the following pair of pre-service teachers, to wit: *“data analysis was possible because of information we collected through field notes, interviews, questionnaires and the assignments students’ submitted”* (Blanca y Carolina, final report, lines 21-23). Similarly, the data analysis conducted by those participants who had participated in the seminars was deeper. *“...I carried out my analysis by means of data classification into categories”* (Sandra, final report, lines 21-30).

5. Conclusions and Implications

By means of this study, it has been possible to reach sound conclusions for the undergraduate Licenciatura Program in Philology and Languages at Universidad Nacional in regard to how a group of future teachers assumed pedagogical research and how they perceived this experience during their practicum. To begin with, pre-service teachers started a process of demystification. Apparently, they became aware of the fact that research is not denied for teachers and perceived it as an activity which can benefit their profession.

The previous findings remind us how futile it could be to try to implement changes in education without affecting the pre-established beliefs of participants. The early exploration of pre-service teachers, university advisors and cooperating teachers’ perceptions as to the possibilities of teachers becoming simultaneous researchers proved to be a reflective exercise. Reflection can empower student teachers to assume a challenge which is not often simple for teachers, but it is something that each time is more often a demand: research.

In relation to advisors, this can mean to establish a more solid partnership with pupils around the development of projects. The previous course of action emerges as a relevant aspect in the practicum considering that university advisors seem to be the least consulted source to which student teachers turned to solve their difficulties (Hsu, 2005).

Lastly, cooperating school teachers who guide their future colleagues, as one of the more powerful models for student teachers, need to be involved; thus, they understand clearly what student teachers are trying to do and support them. In current experiences I am facing at another public university, student teachers have also been disappointed by cooperating teachers' attitudes since they simply refuse to let them conduct their action-research projects during their practicum.

A second finding during the study showed that the demanding character of research posed several challenges for student teachers while they tried to become teacher researchers. Firstly, having an embryonic knowledge of research triggered feelings of insecurity in our participants who doubted their skills to work on it. This matches what Russell (2000) and Tercanlioglu (2004) found in their studies as described in a previous section. Another limitation emerged from the time consuming nature of research. The traditional practicum duties pre-service teachers had to fulfill along with their new role seemed to be too much for them, which resulted in anxiety. Finally, the myriad of relations they had to establish with school and university staff added to complex institutional settings proved to be, in some cases, unfavorable for their intended achievements. Cárdenas & Faustino (2003), previously reviewed, referred to a similar situation in their investigation.

The tangled reality that the teaching practicum represents for student teachers implies serious considerations in determining the extra demands that will be made from them. Many of us, in-service teachers working at the various levels of the school system, know very well the difficulties of conducting research along a huge load of some other curricular duties.

Actions can be taken then to facilitate student teachers' research plans. An early education of these future teachers in university programs, which systematically and progressively include investigation, might be advisable; this has been the case of Universidad del Valle (Cárdenas & Faustino, 2003) and Universidad de Antioquia (McNulty & Usma, 2005) in which strong connections among the pedagogical and research components of such programs have been built, revealing promising results.

Constant education of the professors who would guide student teachers in their teaching-researching work is also necessary. Because of its nature, in addition to advisors' mastering of the theory and practice of research, they are required to learn extra skills as, for example, how to work cooperatively with others. Public universities' serious considerations on preparing groups of professors to face this challenge undoubtedly imply a revision of their job policies. Nowadays most professors hold short-term contracts which usually do not offer appropriate conditions for them to commit to coaching their student teachers in research during their practicum.

Pre-service teachers were above all positive about being able to carry out research. They considered that investigating demanded their adoption of professional attitudes. Specifically, in the first place, participants accounted for student teachers' increase in reflective skills as McNulty & Usma (2005), Price (2001), Russell (2000), Lopez & Zuluaga (2004) have established. Secondly, responsibility was underlined as a value that was strengthened along this experience. Similarly, student teachers' expertise in teaching had more opportunities to evolve since their continuous observation of teaching settings guided them to focus on their pupils' real life needs as well as interest. Price (2001) agrees with this finding. Moreover, their actual use of research helped them connect theory and practice as pointed out in an investigation by Smith & Coldron (2000).

Research can become the most complete tool for supporting student teachers' reflection along their practicum. In fact, tools such as journals, responses to observation, conferences and focused tasks (Viáfara, 2004; 2005) can be used at various levels of the research activity to encourage reflection in student teachers.

Finally, the process pre-service teachers followed to work on their projects showed that their planning centered on carrying out a diagnosis of needs in their classrooms to focus their research problems, which emerged from their practicum, the Didactics II course or their monograph seminar. Subsequently, they set up their pedagogical strategies using the knowledge acquired during their undergraduate program and, simultaneously, collected data to monitor what happened. Those student teachers who had attended monograph seminars seemed able to manage more complex instruments to gather and analyze information in contrast to those who had not.

References

- Bell, J. (1999). *Doing your research project*. Philadelphia: Open University Press.
- Cárdenas, R. & Faustino, C. (2003). Developing reflective and investigative skills in teacher preparation program: The design and implementation of the classroom research component at the foreign language program of Universidad del Valle, *Colombian Applied Linguistics Journal*, 5, 22-38.
- Cohen, L. & Manion, L. (1995). *Research methods in education*. New York: Routledge.
- De Tezanos, A. (1998). *Una etnografía de la etnografía*. Bogotá: Antropos.
- Dornyei, Z. (2003). *Questionnaires in second language research: Construction administration and processing*. London: LEA (Lawrence Erlbaum Associates) Publishers.
- Elliot, J. (1990). *La investigación acción en educación*. Madrid: Ediciones Morata.

- Freeman, D. (1998). *Doing teacher research: From inquiry to understanding*. Canada: Heinle and Heile publishers.
- Gallego, L., Quintero, J., & Zuluaga, C. (2001). Promoting research in the teaching practice of the modern language licenciatura programs. *How. A Colombian Journal for English Teachers*, 8, 43-40.
- Hsu, S. (2005). Help-seeking behaviour of student teachers. *Educational Research*, 47(3), 307-318.
- Hubbard, R. & Power, B. (1999). *Living the questions: A guide for the teachers-researchers*. York, Maine: Stenhouse Publishers.
- Hubbard, R. & Power, B. (1993). *The art of classroom inquiry. A handbook for teacher-researchers*. New Hampshire: Heinemann.
- Huberman, M. & Miles, M. (1994). Data management and analysis methods. In Denzin, N. & Lincoln, Y. (Eds.), *Handbook of Qualitative Research*. California: Sage Publications.
- Jiménez, S., Luna, M., & Marin, M. (1993). *Action research guide*. Thames Valley University of London: COFE Series publications.
- Lassen-Fremman, D. (1993). *An introduction to second language acquisition research*. Essex: Longman.
- Ley General de Educación. (Ley 115 de 1994). MEN. Bogotá.
- Lopez, M. & Zuluaga, C. (2005). Impacto de la formación investigativa en los estudiantes de licenciatura en idiomas de la Universidad de Caldas. *Lenguaje*, 33, 286-303.
- McNulty, M. & Usma, J. (2005). Evaluating research skills development in a Colombian Undergraduate Foreign Language Teaching Program. *Íkala Revista de Lenguaje y Cultura*, 10(16), 95-125.
- Nunan, D. (1993). *Research methods in language learning*. Cambridge: Cambridge University Press.
- Plan Global de Desarrollo 1999 – 2003. Liderazgo por resultados. “Propuesta de Proyecto sobre Investigación Educativa y Formación Docente”. Espacio Abierto, Boletín de la Sede de Bogotá, Universidad Nacional de Colombia.
- Price, J. (2001). Action research, pedagogy and change: The transformative potential of action research in pre-service teacher education. *Journal of Curricular Studies*, 33(1), 43-74.
- Quintero, J., Zuluaga, C., & Lopez, M. (2003). La investigación-acción mejora la planeación de clases en lengua extranjera. *Íkala Revista de Lenguaje y Cultura*, 8(14), 39-56.
- Russell, T. (2000). Introducing pre-service teachers to research. Paper prepared for Session 18.16. at the American Education Research Association. Retrieved November 15, 2007, from <http://educ.queensu.ca/~ar/aera2000/russell.pdf>

- Seliger, H. & Shohany, E. (1989). Second language research methods. Hong Kong: Oxford University Press.
- Smith, R. & Coldron, J. (2000). How does research affect pre-service students' perceptions of their practice? Retrieved November 15, 2007, from <http://www.eric.ed.gov/ERICWebPortal/recordDetail?accno=ED446030>
- Stenhouse, L. (1982). La investigación como base de la enseñanza. Madrid: Morata.
- Strauss, A. & Corbin, J. (1990). Basics of qualitative research. Grounded theory, procedures and techniques. London: Seige publications.
- Tercanlioglu, L. (2004). Pre-service EFL teachers' attitude toward research. Retrieved November 15, 2007, from <http://www.readingmatrix.com/conference/pp/proceedings/leyla.pdf>
- Universidad Nacional de Colombia Sede Santa fe de Bogotá. (noviembre 1998). Plan Global de Desarrollo 1999 – 2003. En Boletín de la Sede Santafé de Bogotá, Espacio Abierto, 3.
- Viáfara, J. (2004). The design of reflective tasks for the preparation of student teachers. *Colombian Applied Linguistics Journal*, 7, 53-74.
- Viáfara, J. (2005). Responding to observation: How student teachers' use of their counselor's notes support their preparation, *PROFILE*, 6, 141-156.
- Wallace, M. (1988). Action research for language teachers. Edinburgh: Cambridge University Press.

