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AN ANALYSIS OF THE RESEARCH PROCESSES INVOLVED IN AN ACTION RESEARCH PROJECT: A CASE STUDY

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ABSTRACT

This article explores the process followed by an English as a foreign language (EFL) teacher when conducting action research in her conversation class. Action research helped the teacher in this case study solve a real problem with her beginning students: their lack of understanding of her oral instructions. Documenting her experience serves a two-fold purpose: a) to underscore the benefits of action research and its validity to seek improvement in the language classroom and b) to shed light on the process of carrying out action research, from the stages prior to topic selection to the ones involved in the project itself, which is seldom discussed in detail in the final version of a study. Thus, this case study, carried out in an MATESOL program, offers students and novice practitioners a practical account of the process of undertaking teacher-research.
Key words: second language, EFL literacy, ideological model, teaching composition.

RESUMEN

Este artículo explora el proceso que siguió una profesora de inglés como lengua extranjera al llevar a cabo un proyecto de investigación-acción en un curso de inglés conversacional. Por medio de este paradigma, la profesora en este estudio de caso pudo resolver un problema real en su clase de principiantes: la falta de comprensión de sus instrucciones orales por parte de los estudiantes. El documentar dicha experiencia de investigación tiene dos objetivos: a) enfatizar los beneficios de la investigación-acción y su validez para promover el mejoramiento de la enseñanza de los idiomas y b) iluminar el proceso de realizar investigación-acción, desde las etapas previas a la elección del tema hasta la ejecución misma del proyecto, que rara vez se discute en detalle en la versión final de un estudio. De este modo, el presente estudio de caso, llevado a cabo en un programa de Maestría en enseñanza del inglés, ofrece una explicación práctica sobre cómo realizar investigación en el aula, útil para estudiantes y profesores con poca experiencia en el campo.
Palabras clave: segunda lengua, EFL alfabetización, modelo ideológico, enseñanza de la composición.

1. Introduction

During the last decade, action research has gained recognition in the field of language classroom research. Several publications have offered guidelines for conducting action research with the purpose of encouraging teachers to explore their own classrooms in search for improvement (Burns 1999, Freeman 1998, Nunan 1992, Wallace 1998). However, for many second and foreign language teachers, action research is still a relatively new area of inquiry, one that is considered beyond a teacher's scope of knowledge, especially, because the word ´research´ often conjures up complicated statistical procedures from the experimental tradition. Although much simpler to apply if compared to the scientific rigor of the experimental approach, action rese-

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arch still presupposes the development of research skills that may be unknown to many teachers.

Burns (1999) reports that many L2 teachers do not feel confident about conducting teacher-research due, in part, to their lack of research skills. McKernan's study about the limitations of action research projects also found the same issue in a group of project directors in L1 educational contexts in the USA, the UK, and Ireland (as cited in Burns 1999).

David Labaree (2003) analyzes the difficulties of the transition from teacher to researcher in educational doctoral programs in the United States. Labaree makes a very interesting recommendation that also applies within the context of second language teacher research. He asserts that,

> Faculty members need to be willing to talk more about how they carry their own research –not the rationalized, normalized, and carefully reconstructed version they present in journal articles but the real process they followed from beginning to end, in all its complexity and incoherence. (21)

Therefore, for research to become "a central part of teaching" (Freeman 1998: 5), we need to disseminate not only the results but also the process of conducting practitioner research. This may contribute to consolidating action research as a tradition, a need that Bailey (1999) pointed out in her overview of two decades of classroom research.

Thus, the aim of this article is to document the process followed by Lilliam Abreu, a novice EFL teacher who conducted an action research study as part of a research course that I teach in the master's program in TESOL at the University of Costa Rica. Her research experience teaching a conversation class to senior students is the basis for this paper, together with other relevant observations that emerged from our research class, which can be illuminating for student-researchers and teachers who are novice in the realm of action research. My observations of Lilliam's research experience were conducted throughout a period of three months, and the data came from our student-teacher conferences, from notes I took immediately after each conference and during our regular classes when Lilliam shared her research experience, as well as from her own written account of her research project.

Action research helped Lilliam explore a crucial issue in her conversation class: the students' poor understanding of her oral instructions, which limited their participation and forced her to use a lot of Spanish in the class. Through action research, she investigated the possible causes of the problem and developed alternative courses of action that led her to improve her teaching skills and ensure student success.

2. Defining action research

In their definition of action research, Kemmis and McTaggart (as cited in Nunan 1990) underscore the need to seek improvement of our classroom practices as a basic feature of this paradigm. They state that,

> The linking of the terms 'action' and 'research' highlights the essential feature of the method: trying out ideas in practice as a means of improvement and as a means of increasing knowledge about the curriculum, teaching and learning. The result is improvement in what happens in the classroom and school, and better articulation and justification of the educational rationale of what goes on. Action research provides a way of working which links theory and practice into the one whole: ideas-in-action. (63)

Thus, action research provides useful data not only for teachers in their particular classrooms but also for curriculum designers, who working collaboratively with teachers, can make informed changes by linking theory and practice. Teachers and curriculum planners or administrators can analyze the ideas in action and propose appropriate changes based on the new understandings about their teaching situations.

Kemmis and McTaggart (as cited in Nunan 1992) identify three main characteristics of action research: (a) it is carried out by teachers in their own classrooms, as opposed to research in the traditional paradigms which is carried out

by researchers, (b) it is collaborative, and (c) its main purpose is to promote change and seek improvement.

Burns (1999) describes action research as:

> A systematic process of investigating practical issues or concerns which arise within a particular social context. This process is undertaken with a view to involving the collaboration of the participants in that context in order to provide evidence that can point to change. (31)

Action research is conceived, not as theory-driven, but as theory-building, meeting the requirements of 'grounded theory' that Glaser and Strauss (as cited in Burns 1999) identify as typical of qualitative research studies. Burns (1999) analyzes several definitions of action research proposed during the last forty years and comes up with a set of common elements that help understand what action research is:

> a. Action research is contextual, small-scale and localised –it identifies and investigates problems within a specific situation.
> b. It is evaluative and reflective as it aims to bring about change and improvement in practice.
> c. It is participatory as it provides for collaborative investigation by teams of colleagues, practitioners, and researchers.
> d. Changes in practice are based on the collection of information or data which provides the impetus for change. (30)

Among these elements, the collaborative and participatory nature of action research is the most important characteristic that most authors drawn attention to, as Burns (1999) points out. She argues that teachers can contribute very little to changing policies or seeking improvement of the social structures of an institution if they work in isolation. The changes, understandings, and improvement reached through an action research study also have to transcend the limits of an individual classroom in order to do critical reflection about the underlying institutional policies or the educational system.

Nevertheless, when the teacher's aim in an action research project is not to change institutional policies but to gain insights about very particular issues of his or her practices, then individual endeavors are perfectly possible. Wallace (1998) acknowledges the usefulness of individual teacher research projects. In his own words, "as a practicing teacher, I can decide to investigate some aspect of my own teaching, collect the relevant data and analyse it, come to certain conclusions, and keep whatever findings I have arrived at completely to myself" (Wallace 1998: 207-208). This type of action research is commonly practiced by many teachers because it allows analysis and reflection on professional matters of our sole concern. Yet Wallace cautions that it should not become the only type of teacher research that we engage in. Both collaborative and individual efforts should enrich teaching practices because of the contextual nature of teaching.

3. Alternatives for collaboration in action research

Wallace (1998) recommends five different ways in which collaboration can take place in an action research project. A teacher can plan collaboration with "students, colleagues in the same department/school/institution, colleagues outside our school/institution, colleagues with a different area of expertise, (…) colleagues in other disciplines, (…) and colleagues in other countries" (Wallace 1998: 208). Each of these types of collaboration is explained below, based on Wallace (1998: 209). The explanation of the first alternative has been expanded in order to include sample activities Wallace offers in different sections of his book.

a. Involving students in data collection: Teachers can plan class activities that both benefit students and generate research data. Wallace suggests the following sample activities:

- *The fishbowl technique:* student observers sit around an inner group of students and collect data about a specific behavior.
- *Learning - about - learning technique*[1]: students share their opinions with the whole class or in small groups about an area of their learning process, for instance, their

learning strategies. Student observers or the teacher can take notes about the issues and, if necessary, the names of the students who mentioned them. Lilliam, the teacher in this study, used this type of student collaboration in her action research.

- *The learning log:* students keep logs about a particular issue, such as time spent in a particular task, or record their impressions about learning strategies in order to gain metacognitive awareness. Possible topics include: reading strategies, revising strategies, and prewriting techniques used at home.
- *Student interviews*: students interview each other in order to find out opinions about a specific area of their learning. As an example, Wallace suggests students can inquire about their attitudes to learning English.

b. Involving colleagues in the same department/school/institution: This type of collaboration facilitates the research effort and offers the benefit of mutual encouragement.

c. Involving colleagues from another institution: Very rewarding experiences result from this type of collaborative research due to the new windows of opportunities in different teaching settings.

d. Involving colleagues with a different area of expertise: This type of cooperative effort can be very enriching and allows practitioners to undertake different tasks according to their skills.

e. Involving colleagues in other countries: Technology now allows teacher-researchers to cross borders and benefit from a comparison-contrast approach in different settings, including, for example, "foreign language and mother tongue comparisons of (…) reading and writing processes" (Wallace 1998: 209).

f. Involving elementary and/or high school teachers in student-researcher projects: I am adding this type of collaboration to Wallace's list in an attempt to encourage graduate and Licenciatura TESOL students in Costa Rica to work collaboratively with elementary and/or high school English teachers in their research projects. Being able to engage in a dialog with university students would be extremely helpful for many secondary and elementary school instructors and, at the same time, would become an example of how to create a much stronger bridge between the university and the community, as Zeledón (2003) has proposed. The students in my research classes who have implemented this type of collaboration have reported very enriching experiences for the parties involved. Although the student-researchers have the leading role in terms of data analysis, they receive collaboration from the teachers during data collection. In turn, the elementary and high school teachers benefit from the research experience through the dialog they engage in with the student-researcher throughout the study. Furthermore, at the end of the research project, the teachers receive a handout, produced by the student-researchers, which provides useful guidelines, activities, and/or a theoretical rationale with direct application to the course they observed.

This wide array of possibilities certainly enhances the nature of action research and facilitates the ultimate outcome of any action research project: the need to seek improvement of classroom and/or institutional practices and to gain understanding of this particular setting.

4. Processes involved in action research

Action research has generally been described as a series of cycles: planning, action, observation, and reflection (Kemmis & McTaggart as cited in Burns 1999). Based on a perceived problem, the researcher plans a cycle of action, observes the results, reflects about the understan-

ding gained, and then plans a new cycle of intervention that can be repeated as necessary depending on the particulars of the research study. Similarly, for Freeman (1998) teacher-research involves two important sets of processes. Borrowed from van Lier's typology (as cited in Freeman 1998), the first process consists of determining the degree of intervention and restructuring of the class environment that the teacher will need in the study. The second process, which Freeman calls "the teacher-research cycle" (33), consists of six elements: inquiry, question/puzzle, data collection, data analysis, understandings, and making public.

For Burns (1999) action research involves a much more complex series of interconnected phases rather than cycles: "exploring, identifying, planning, collecting data, analyzing/reflecting, hypothesizing/speculating, intervening, observing, reporting, writing, and presenting" (35). The phases are not linear, though, which means that this view agrees with that of the other authors who recognize overlapping and recursiveness in the action research process. Burns also notes that each action research study is different and thus allows for the researcher's particular choice of appropriate dynamics.

Wallace (1998) views action research as embedded within a professional development reflective cycle with a set of phases similar to the ones in Freeman's and Burn's works. Based on an inquiry, the teacher reflects about a problem or issue, asks questions, decides to conduct action research, collects and analyzes data, and then applies the results to "professional action" (14).

Based on this review of the possible stages in action research, let us analyze Lilliam's study. An explanation of the context of her study is offered first, followed by the stages she went through and the institutional impact of her investigation.

5. Context of the study

The institution where Lilliam conducted her action research project offers different types of educational and recreational programs for senior citizens, conversational English being one of the choices. With a main focus on oral communication, the course also involved a small reading and writing component. The class met twice a week for a total of four hours during a semester. Although the course was for beginners, there were mixed levels of proficiency in the group, from elementary to low intermediate. For this reason, Lilliam selected a sample of 20 beginning students, out of a group of 40, whose ages ranged between 55 and 75 years old. Her study, which focused on giving instructions, lasted approximately 10 weeks.

6. Phases followed in the research process

It is important to point out that practitioner research poses similar problems to the researcher as the composing process does to the writer. During the initial stages both processes may cause a lot of uncertainties because we might need to first explore the context to discover ideas and gather some preliminary data before isolating the specific problem we want to work with. For this reason, teachers should keep in mind that the process of conducting action research may raise many doubts regarding the steps to follow, but the route will look clearer as we proceed with the journey. In her study, Lilliam went through the following set of phases adapted from Burns (1999), Freeman (1998), and Wallace (1998).

a. Selecting an area(s) of my interest

b. Exploring and reflecting about my teaching context

c. Choosing and developing a topic
d. Selecting data gathering techniques

e. Planning and implementing the action

f. Observing and analyzing data

g. Reflecting about the research process

Each of these phases is explained and illustrated below using the experience documented from Lilliam's research study and from some relevant activities in our research class.

6.1. Selecting an area(s) of interest

Selecting a general area of interest in ESL/EFL became the starting point for practitioner research in our class (adapted from Wallace 1998). Lilliam's choices included the teaching of speaking and listening to true and false beginners. Wallace suggests different variations of this phase, such as picking areas for improvement and areas of professional strength.

6.2. Exploring and reflecting about my teaching context

This exploratory phase took place during the first and second sessions of our research class. Through small-group and whole-class discussions, Lilliam had a chance to share pressing concerns about her teaching situation with the other student-researchers in the class who provided feedback. Table 1 shows the variety of issues that she raised.

After this exploratory session, Lilliam had some ideas about possible topics, but she was not sure yet about a specific focus.

6.3. Choosing and developing a topic: Writing research questions

Selecting a topic is one of the most difficult tasks when doing teacher research. Within the wide array of possibilities explored in the initial brainstorming sessions, it is difficult to prioritize and to pinpoint what exactly can become a researchable issue. In the present study, for her topic to take shape, Lilliam went through three one-hour brainstorming sessions, two preliminary class observations, and one additional session for prioritizing topics.

Let us explore in detail how Lilliam arrived at the topic of analyzing her own instructions. After identifying her major concerns (Table 1), Lilliam was asked to decide which ones worried her the most and would benefit from research (Wallace 1998, Burns 1999). She selected four issues: the mixed levels of proficiency, the use of Spanish, the students' lack of interest in the tasks, and their lack of self-esteem (see TABLE 2 below).

Having selected these four possibilities, Lilliam conducted two informal observations in her own class in order to determine what seemed to be the most important problem. However, pin-

TABLE 1
Lilliam's major concerns in her teaching context

I have a very large group of students (approximately 40). Some of them have mobility problems (they are on wheel chairs), so I have problems when organizing certain interaction activities because they move very slowly.
The students have very different levels of proficiency, which makes it difficult for me to plan activities.
Many students don't understand almost anything of what I say in English, so their participation is very limited. I need to use a lot of Spanish.
Some of the students don't seem to be interested in the activities. The tasks seem overwhelming for them.
Many students lack self-esteem. They complain a lot about their lack of abilities. They say they can't learn anymore.

TABLE 2
Selecting researchable issues

Major Issues Identified during Brainstorming Sessions	**Place a check next to the issues that would benefit from research the most**
I have a very large group of students (approximately 40).	
Some of the students have mobility problems (they are on wheel chairs) so I have problems when organizing certain interaction activities because they move very slowly.	
The students have very different levels of proficiency, which makes it difficult for me to plan activities.	✓
Many students don't understand almost anything of what I say in English, so their participation is very limited. I need to use a lot of Spanish.	✓
Some of the students don't seem to be interested in the activities. The tasks seem overwhelming for them.	✓
Many students lack self-esteem. They complain a lot about their lack of abilities. They say they can't learn anymore.	✓

ning down what issue to examine first was difficult for her. At the beginning, her tendency was to try to examine all these interrelated problems at the same time. However, Burns (1999) warns teachers against trying to cover many issues under one action research study. Therefore, during a conferencing session, I helped her discover her topic through the following guidelines that emerged from our discussion. In her case, prioritizing required balancing the different issues in order to:

a. Determine the degree of importance of the issues in the particular classroom context under investigation;
b. Establish possible cause-effect relationships, for instance through flow charts, in order to find out what issue seems to lie at the bottom and therefore needs to be investigated as a probable primary cause of the problem; and
c. Determine which issue may be investigated in a shorter term than the others.

Each of these guidelines is analyzed below in the context of her project.

6.3.1. Degree of importance

First of all, because she was teaching a conversation course, the fact that she had to use a lot of Spanish was a major constraint for the course goals; therefore, this problem ranked first in importance. Second, if the students seemed to lack interest and self-confidence, they probably were not going to participate enough and therefore would not reach the course goals either. Because this was also a very important problem, she would need to find out, through questionnaires and inventories, if it was a prevalent problem in the group. Finally, the mixed levels of proficiency ranked last and, in her opinion, the problem involved administrative more than methodological measures. At this point she was planning to ask the administration to split the group but was not sure if this was a possibility for the institution.

6.3.2. Cause-effect relationship

According to her preliminary observations, the students' lack of interest seemed to derive, not from task complexity, but from the fact that many of them did not understand basic instructions, so they did not know what to do and gave up easily

until the teacher or another classmate explained the task in Spanish. In her own words,

> During our sessions, I realized that the lessons went very slow because the students were not responding to my instructions, breaking down the lesson plan many times. Although I thought I was trying hard to make them understand what I wanted them to do in class, I realized it was an unsuccessful effort. I was always forced to give the instructions in Spanish. At first I thought that they were reluctant to participate for several reasons: lack of interest, task difficulty, and anxiety. However, when giving the instructions in Spanish, most of the students moved easily to the tasks.
>
> (*Lilliam Abreu, unpublished research paper*)

Thus, Lilliam's preliminary observations helped her rule out task complexity, lack of interest, and anxiety as possible causes of the problem and led her directly to the use of Spanish in the class when giving instructions. Besides, the lack of self-confidence in their learning ability, which the students pointed out as due to their age, although a much broader and complex issue, seemed to be partly related to the fact that students did not understand instructions in English. If the language Lilliam used was very complex or her instructions were long and redundant, her beginning students would not understand what to do, which, in turn, would be detrimental for their self-confidence.

> It was imperative that I change this situation. I wanted (…) my students [to] respond to my instructions in English. Thus, I needed to discover more effective ways of giving instructions and help the students participate in the classroom activities. The focus of my research [is] to find out why the students were not understanding and responding to the instructions, and how I could give them opportunities to experience more success in our language classroom through active participation.
>
> (*Lilliam Abreu, unpublished research paper*)

Besides, once she improved her instructions, Lilliam could start examining student participation if she still found it to be a problem.

6.3.3. Length of time to investigate the issues

The domain of teacher instructions in an oral course was definitely much more concrete and researchable than that of the students' lack of self-confidence, which may be influenced by many different variables and require a longer period of time to investigate. Therefore, investigating the topic of giving instructions in English and its possible link to the students' increased self-confidence could become the point of departure for a future investigation on broader issues about self-confidence.

Thus, the process followed along several valuable brainstorming sessions, hidden "in all its complexity and incoherence," (Labaree 2003: 21) when we read the final product, helped shape the purpose of this action research study, which Lilliam describes below:

> The focus of my research is to find out why the students are not understanding and responding to instructions and how I could give them opportunities to experience more success in our language classroom through active participation.
>
> (*Lilliam Abreu, unpublished research paper*)

The next step after selecting a topic is to formulate action research questions. Cochran-Smith and Lytle (as cited in Burns 1999) highlight that teachers' research questions may be as important as those in traditional forms of research since they tend to emerge from a link between theory and practice. Action research questions are based on real concerns in the class.

Freeman (1998: 34-35) provides definitions of two important elements in question formulation –inquiry and question/puzzle:

> Inquiry is speculating about why something is as it is, why it happens or works (or doesn't happen or work) the way it does. It is a state of being engaged in what is going on in the classroom that drives one to better understanding. Inquiry includes both the attitude that spawns this engagement and the energy and activity that put it into action.
>
> A question or puzzle is the concentration of a line of inquiry into an articulated form. It focuses and specifies the broader inquiry in a form that can be acted upon through investigation.

Freeman (1998) explains inquiry as the deep structure of the process because it "drives teacher-research" and "research-able questions [as]

the surface-structure manifestations of inquiry" (35). Not every question we pose may be answered through research. Some questions may be too general while others may be answered as we teach. For this reason, Freeman puts a hyphen in the word 'research-able' with the purpose of emphasizing that research questions have to be answerable through a research process.

Despite originating in our own classrooms, the formulation of good action research questions still represents a challenge for many teachers. This problem is reported by Brindley (as cited in Burns 1999) in his study about teacher perceptions on the research process. He found that narrowing down the topic to a concrete research question was one of the most difficult tasks for teachers. Another common concern, apparently influenced by the experimental tradition, which aims at proving or disproving hypotheses, is whether questions identified in the beginning stages have to remain unchanged until we find the expected answers. Burns (1999) offers light in this respect through two major approaches for question formulation in action research: open questions and closed questions. The former entails an "evolving approach" (68), which means that teachers can begin exploring a context without a clear-cut research question. Observation and reflection will help define a question once the true nature of the issue becomes apparent. On the contrary, closed questions, based on "a sequenced approach" (68), are roughly stated at the beginning of the study and refined in subsequent stages.

Burns (1999) also recommends the following guidelines for writing questions[2]:

a. Questions have to lead to outcomes, so we have to "avoid questions [we] can do nothing about" (55).

b. Questions should involve small-scale objectives that can be achieved in a definite amount of time.

c. Questions should "focus on one issue at a time" (55). Thus, the researcher can examine it from different angles and increase the validity of the research.

Based on these guidelines, let us examine Lilliam's research questions. These are her preliminary questions.

- How can I elicit a response from my students to my English instructions?
- What changes can I make in the way I give instructions and what type of strategies could I use to help my students react to class activities?

Both questions meet the principle of being research-able and leading to outcomes. However, we can see there is overlapping between the questions because both deal with strategies for giving instructions. Furthermore, the second one contains two questions in one and therefore should be restated.

The examination of the question formulation process Lilliam went through indicates an important finding. At this point, she did not have a well-defined focus of her research, one more sign of the hidden incoherence that Labaree (2003) wants us to uncover for student-researchers. She began with closed questions that she later had to refine in stage five, planning and implementing the action (see Table 3 below), when new understandings were under way. Therefore, our analysis of her research questions continues after the next section in order to help the reader have a chronological perspective of the research process. Lilliam's question formulation process illustrates that the research process itself is by no means linear but recursive, as the composing process. It requires going back and forth through the different stages discovering the nature of the issue under scrutiny.

6.4. Selecting data-gathering techniques

During one of our conferencing sessions, Lilliam and I agreed that before collecting data about her instructions, she needed a very important component: knowing more about her students as learners (Crandall & Peyton 1993). She would need to investigate the appropriateness of her instructions for this particular group of stu-

dents; therefore, she had to define this appropriateness in terms of what her students required as learners to successfully understand instructions and carry on the task. For this purpose, she used a learning style inventory (Oxford 1989) and a learning strategy inventory (Reid 1998). Because one of her early concerns was the students' lack of interest and self-esteem, Lilliam also passed a questionnaire for assessing motivation (Ehrman 1994) and a questionnaire for assessing students' self-concerns as learners (Williams & Burden 1997).

During the actual phase of studying her instructions, Lilliam audio recorded the class sections involving instructions. Video recording was not used to avoid adding more stress to the already anxious group of senior students. Besides, a small tape recorder would fit her purposes well. This technique was complemented with note-taking in order to "document and reflect systematically upon [the teacher's] behavior while giving instructions to the students, as well as their responses to the instructions" (Abreu, unpublished research paper).

6.5. Planning and implementing the action

Planning and implementing the action is one of the most important but also difficult parts of the research process. Here is where the complexity of doing action research becomes more evident than in previous phases. In Lilliam's case, she reported having experienced difficulty and a lot of uncertainty about how the organization of the steps in her plan and its implementation. Like most of the other students in her research class, she was unsure about the specific courses of action her study was supposed to follow. The literature on action research presents models of the basic stages, such as Kemmis and McTaggart's (as cited in Burns 1999) cycles of action, Freeman's (1998) teacher-research cycle, and Wallace's (1998) model of action research as a professional development strategy. However, as Burns (1999) asserts, the decision about the type and number of phases to follow lies entirely on the researcher's hands because it hinges on the particulars of each scenario.

Lilliam's plan involved investigating what kind of instructions she gave and what kind of changes she had to make until the students achieved improved levels of understanding. When brought into practice, this plan first required a phase of seeking knowledge, adapted from Gebhard and Oprandy (1999), which was carried out in two parts, before actually planning and implementing the action. Seeking knowledge was, in fact, still part of the exploration of the problem (Burns 1999, Freeman 1998). Lilliam was going back and forth between the phases of exploration, data gathering, and planning. Here is an account of what she did during this part of the process.

6.5.1. Seeking knowledge: Part one

Her objective was to investigate the students' learning styles and strategies and their possible influence in their understanding of the teacher's instructions. The students filled out the questionnaires and inventories mentioned above (see Selecting Data Gathering Techniques) and later, they were asked to share the results for the purposes of developing their awareness about learning and engaging them in a collaborative dialogue that also contributed to Lilliam's data gathering.

6.5.2. Seeking knowledge: Part two

In this part Lilliam investigated the language and strategies she used while giving instructions and the students' reactions toward her instructions. She audio recorded herself when giving instructions and took notes, both during and immediately after each lesson, on the following issues:

a. student responses to her instructions,
b. her reactions to student comments during instructions, and
c. general comments on the dynamics of specific activities.

Her aim was to get enough data that pointed toward a pattern. During this phase, Lilliam

gathered enough data about her topic and was able to restate her research questions as shown in TABLE 3 below.

The focus of her research expanded and became concrete as the teacher gained knowledge about the students' real needs and characteristics as learners. In her case, knowing the students well was essential for seeking improvement. At this point, having re-focused her research questions, Lilliam was beginning to understand the complexity of the problem.

6.5.3. Discoveries

The major discoveries3 regarding the students' learning styles and concerns are summarized below based on Lilliam's unpublished research paper:

TABLE 3
Restating the research questions

Preliminary questions	Restated questions
How can I elicit a response from students to my English instructions?	What kind of language do I use when giving instructions in English?
What changes can I make in the way I give instructions and what type of strategies could I use to help my students react to class activities?	Based on the students' needs as learners, what changes can I make in the way I give instructions in order to: a. help the students understand and carry on the tasks, and b. reduce the use of Spanish in the class?

a. Most of the students are visual learners. They rely on seeing not only words but also images and gestures.

> Visual learners learn well if they have opportunities to read information, including of course, teacher instructions…. Visual students also learn from observing expressive movements, such as gestures, demonstrations, descriptive scenes, and from any other observable material such as pictures, slides, posters, diagrams, etc.

b. Most of the students "learn by doing things, by getting physically involved in classroom experiences"

c. Students have serious concerns about themselves as language learners.

> Most students find that learning anything new is too difficult, and classroom tasks are also difficult to perform. Results also show that the lack of time to study, the little effort made to progress in learning the language, and the impossibility to perform when they feel stuck are also the group's major worries when learning the language.

d. Students' level of anxiety is very high and therefore may interfere with the way they perform class activities. Besides, they consider their abilities to learn a second language below average.

e. In spite of their high anxiety, the students are motivated to learn English. They want to learn English to:

- Communicate with English-speaking people
- Read books
- Increase self-esteem
- Work out their memory
- Understand movies

(*Lilliam Abreu, unpublished research paper*)

6.6. Observing and analyzing the action

After these important discoveries, the next step was to analyze the teacher's instructions to

see if they matched the students' learning styles, according to the literature. Burns (1999), Freeman (1998), and Wallace (1998) state that action research needs further investigation regarding systematized procedures for analyzing qualitative data. The most common type of analysis currently used consists of "organizing and synthesizing data, finding patterns or trends in the data, and interpreting those trends" (Parsons & Brown 2002: 55).

Teachers should also consult the literature on the topic under investigation in order to use existing classifications authors have suggested. Lilliam searched for patterns in her notes and transcripts of the audio tapes, using the following set of questions adapted from Crandall and Peyton (1993) and Burns (1999):

a. Teacher behavior:
   Is my voice clear?
   Are my instructions clear enough?
   What kind of language do I use?
      a) simple commands
      b) questions
      c) long explanations
      d) examples
      e) restatement or paraphrasing
      h) simple words/grammar
   Did I use visual support?

b. Student behavior:
   Do the students respond orally to the instructions?
   What non-verbal behavior do I have to take into account?

c. Reflection:
   What did I learn from this analysis?

The analysis of her notes and instructions yielded the following general patterns:

Teacher behavior:
- No visual support: pictures, key words on the board
- No modeling of tasks for students
- Too much repetition
- Use of Spanish was always necessary at the end
- Long explanations of grammar while giving instructions
- Long sentences, a lot of questions for one task
- Fast speech rate

Student behavior:
- Very anxious when trying to understand a task
- Silence, no response
- Didn't move to task until third repetition
- Use of Spanish for asking for clarification
- Use of Spanish when talking to each other while the teacher is giving instructions

(*Lilliam Abreu, unpublished research paper*)

The next step was to plan a second cycle of action based on the new understandings. Lilliam's plan included incorporating the following changes:

a. Using visual support (writing key words and questions on the board, using pictures and posters with common class actions, and modeling tasks)
b. Avoiding long explanations
c. Reducing the use of Spanish
d. Reducing the speech rate
e. Asking individual students to restate complex instructions to their understanding

(*Lilliam Abreu, unpublished research paper*)

As part of this phase, Lilliam also made predictions about the expected outcomes of her plan that, in general, refer to increasing students' understanding and on-task behavior. She again recorded herself and then analyzed her instructions and the students' responses to each of the above changes. Her analysis of teacher behavior revealed that she implemented most of the planned changes, except for reducing her speech rate. Furthermore, she obtained most of the expected outcomes in student behavior:

a. Fewer students asked for repetition of instructions.
b. Most students moved to the task faster.
c. Students did not speak in Spanish while the teacher was giving instructions.
d. Students were excited when asked to model a task for the rest.
e. Individual students tried to restate instructions in English but gave up and resorted to Spanish.

(*Lilliam Abreu, unpublished research paper*)

6.7. Reflecting about the research process

As Cohen, Manion, and Morrison (2000)

assert, reflection occurs throughout the action research process. Although usually listed at the end of the action cycles or sets of phases, reflection is omnipresent in action research. It helps teachers move toward solutions in search for improvement. Continuous reflection allowed Lilliam to change or adjust different elements of the investigation as needed. Reflection led to refocusing the main issues, restating the research questions, proposing changes, predicting possible outcomes, and making interpretations.

Overall, the results of her study indicated improvement in the students' understanding and performance of tasks due to a closer match between their preferred learning styles and the teacher's techniques for giving instructions. A combination of these techniques was more successful than using them in isolation. Furthermore, the use of Spanish consistently diminished as she continued to use these techniques. Parallel to these changes, she noticed an improvement in student attitude reflected in their promptness and willingness to move to the tasks. Speaking at a fast rate did not bother her much anymore because the students had other resources to compensate for it and succeeded in understanding her.

7. Institutional impact of the study

Lilliam's action research study led to an important change in the institution where she was teaching. Since the beginning of her study, she kept the administrator informed about the main problems she had encountered with the group, due especially to the large number of students and their mixed levels of proficiency. After knowing about Lilliam's observations regarding the students' learning styles and their problems with self-confidence, the administrator recognized the need to divide the group into two sections. Besides the obvious advantages for the students in a small conversation class, this action research also brought awareness to the institution's administration, and the teacher herself, about the importance of teacher research and the benefits it can bring to an institution.

8. Conclusions

Exploring the process of conducting action research revealed interesting discoveries about its subtleties, generally absent from the written version of a study. As teachers, we are constantly encouraged to do classroom research in an attempt to improve our practices (Anderson 2001; Cohen, Manion, & Morrison 2000; Edge 2001); however, we have few windows open to look at the nature of the number of processes involved. The current study illuminates the area of teacher-research by offering an insider look at the variety, intricacy, and interrelatedness of these processes. The study reported on indicated the usefulness of action research in a specific teaching context for solving a major problem that interfered with the teacher's satisfaction with the outcomes of her class, the students' achievement of the course goals, and their overall sense of success in the class. For other teachers to feel motivated to conduct action research, it is necessary to continue to unveil the processes of classroom research, which although challenging, are certainly very rewarding.

9. Notes

1. Slightly adapted from Wallace (1998). The name of the technique is mine, and the procedures are based on Wallace's account about the importance of teaching learning strategies in the section on learner training, pp.89-90.

2. Burns (1999) provides several examples of research questions in the chapter "Getting Started".

3. The present study reports on Abreu's major findings because specific details are beyond its scope.

10. References

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