Effectiveness of the Integration of ICT Tools and Activities to Foster Awareness as the First Stage to Reach Learning Autonomy[1]

La Efectividad de la Integración de Herramientas TICs y Actividades para Promover Conciencia Metacognitiva, la Primera Etapa para Lograr Autonomía en el Aprendizaje

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Abstract

This article presents an action research study which integrated activities within two core subjects during one academic semester with first semester English language students. The students were guided through decision making, independent practice, and the development of metacognitive processes to study English using ICT tools. They were also expected to actively engage in developing their awareness, which is considered to be a key to self-regulated learning and the basis for autonomous attitudes and behaviors. Data was gathered through students' perceptions of the effectiveness of the activities, reflections, and students performances in their English class. The outcomes reveal that integrating the use of metacognitive control strategies and independent activities enhanced by the use of ICT within the context of basic-level language learning has a positive impact on students' performance. It not only contributes to the development of student's language proficiency, but also provides them with insights about themselves as learners. This experience can also be transferred to other aspects of students' academic lives and thus play a role in achieving lifelong learning. The approach undertaken during this experience is shown to enhance student understanding in a way which is consistent with sociocultural theories of learning.

Keywords: metacognition, awareness, ICT tools, linguistic proficiency

Resumen

Este artículo presenta un estudio de investigación-acción que integró las actividades realizadas en dos asignaturas cursadas por los estudiantes de inglés de primer semestre durante un semestre académico. Los estudiantes recibieron orientación de sus docentes en cuanto a la toma de decisiones, trabajo independiente, y el desarrollo de procesos metacognitivos para estudiar inglés usando herramientas TICs. Los investigadores consideran que el desarrollo de la conciencia metacognitiva es una condición clave para facilitar el aprendizaje autorregulado que a su vez es la base de comportamientos y actitudes que evidencian el inicio de los estudiantes en el proceso de desarrollo de la autonomía. Los datos provienen de las percepciones de los estudiantes sobre la efectividad de las actividades realizadas, reflexiones y el desempeño de los estudiantes en la clase de inglés. Los resultados sugieren que el integrar el uso de las estrategias metacognitivas, las actividades independientes, y el uso de las TICs en el contexto del aprendizaje de idiomas a nivel básico genera un impacto positivo en el desempeño de los estudiantes. Lo anterior, no sólo contribuye al desarrollo de la competencia lingüística de los estudiantes, sino también les proporciona conocimientos sobre sí mismos como aprendices. Esta experiencia también puede ser transferida a otros aspectos de la vida académica de los estudiantes permitiéndoles lograr los objetivos de aprendizaje a lo largo de la vida. El enfoque en el que se enmarcó esta experiencia muestra que la comprensión de los estudiantes mejora en la medida en que esta sea consistente con las teorías socioculturales del aprendizaje.

Palabras clave: metacognición, conciencia, herramientas TICs, competencia lingüística

Resumo

Este artigo apresenta um estudo de pesquisa-ação que integrou as atividades realizadas em duas disciplinas cursadas pelos estudantes de inglês de primeiro semestre durante um semestre acadêmico. Os estudantes receberam orientação de seus docentes em quanto a toma de decisões, trabalho autônomo, e o desenvolvimento de processos meta-cognitivos para estudar inglês usando ferramentas TIC. Os pesquisadores consideram que o desenvolvimento da consciência meta-cognitiva, é uma condição chave para facilitar a aprendizagem autorregulada que ao mesmo tempo é à base de comportamentos e atitudes que evidenciam o início dos estudantes no processo de desenvolvimento da autonomia. Os dados provêm das percepções dos estudantes sobre a efetividade das atividades realizadas, reflexões e o desempenho dos estudantes na aula de inglês. Os resultados sugerem que o integrar o uso das estratégias meta-cognitivas, as atividades autônomas, e o uso das TIC no contexto da aprendizagem de idiomas ao nível básico gera um impacto positivo no desempenho dos estudantes. O anterior, não só contribui ao desenvolvimento da competência linguística dos estudantes, senão que também lhes proporciona conhecimentos sobre si mesmos como aprendizes. Esta experiência também pode ser transferida a outros aspectos da vida acadêmica dos estudantes

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permitindo-lhes conseguir os objetivos de aprendizagem ao longo da vida. O enfoque no que se delimitou esta experiência mostra que a compreensão dos estudantes melhora na medida em que esta for consistente com as teorias socioculturais da aprendizagem.

Palavras chave: meta-cognição, consciência, ferramentas TIC, competência linguística

Introduction

The development of autonomy implies students being able to self-regulate. That is, students take responsibility to find the ways to enhance their learning process by paying attention specifically to critical aspects, such as setting goals, selecting appropriate methods, and monitoring procedures (Holec, as cited in Benson, 2001). Framed within a Vygotskian point of view, this process of self-regulation is understood in terms of inner speech, in which students can improve their ability to learn through the use of metacognitive strategies. Metacognition implies the conscious control of how students deal with information, and how they take flexible control. This study is based on the belief that engaging students in self-monitoring and helping them keep track of what they are thinking and feeling while learning will help them increase their knowledge of themselves as learners. This knowledge is believed to also guide and affect the future of their language learning.

Research has shown that teaching students to recognize the effectiveness of using metacognitive strategies helps motivate them to use them (King, 2011). It also requires additional time, guidance and effort. Further, it is acknowledged that the use of ICT tools suits this development as it seems to demand more responsibility on behalf of the students (Beetham & Oliver 2010). These tools offer a wide range of alternatives, and thus students feel there is more compatibility with their learning styles and preferences.

The following research question guided this study:

- *How effective is the integration of ICT tools and activities to foster students' autonomous attitudes and behavior in the first level of English for the development of awareness as the first stage towards reaching learning autonomy?*

With this in mind, several data collection instruments were used. Surveys, designed both by the institution and by the research team, as well as reflections written by the students, and informal field notes taken in one of the classes helped to guide the project and the pedagogical intervention. At the end, it was possible to see that participants exhibited attitudes and behaviors that, according to Scharle and Szabó (2000), correspond to the first stage of developing learner autonomy.

Literature Review

Autonomy and Autonomous Learning

For the purpose of this study Little's (1991) definition of learner autonomy, as the "capacity students have for detachment, critical reflection, decision making and independent action vis-a-vis their learning process" will be adopted (p. 94). It means that students who are allowed to set their own learning goals and analyze their own progress show signs of becoming autonomous. This occurs once they objectively see the nature of their performance, the challenges they need to face, and the means and steps to take to continue succeeding.

Another attempt to define learner autonomy is provided by Dickinson (1987). Here, four issues are addressed; namely, the independence provided to students in order to determine their own learning goals, the path to achieve the goal, the learning pace, and the measurement of success. The first depicts students taking control (Benson, 2001) of the learning circumstances, in regards to both interests and needs. This control taking implies a student who acknowledges the how in the learning process and who involves not only the tools at hand but also the strategies underlying their effective implementation. To exemplify, King (2011) mentions the positive impact of using portfolios to collect the students' outcomes and reflections.

Metacognition and Self-Awareness

Although the term metacognition has been given different assertions by different authors, most of them agree on approaching three core aspects, namely knowledge about knowledge, knowledge of how we are thinking at the moment, and control over our thinking (Kilpatrick, 1985). Metacognition is defined by Flavell, Miller and Miller (1993) as "one's knowledge concerning one's own cognitive processes and products or anything related to them" (p. 232). In this sense, the metacognitive process takes place along with thinking processes. This means that the

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mind becomes aware of itself. Metacognition has to do with students' awareness of their own cognitive processes and the regulation of these processes in order to reach a specific goal so that a reasonable assessment can be made about present and future performance.

Activities such as planning, setting goals, thinking about and describing procedures, monitoring and controlling performances, solving problems, monitoring and assessing one's own thought processes and decisions are metacognitive in nature and considered useful to help students reach high-order thinking skills. Bringle and Hatcher (1999) explain that effective reflection activities that link experience to learning objectives should be guided, occur regularly, allow feedback and assessment, and include the clarification of values. These require direction and guidance from the instructor for students to get the most out of the experience. The authors also point out the importance of reflection about academic courses to stimulate contextualization and connections between academic learning and practical experience.

Teachers should engage students through demanding activities and promote self-evaluation and self-monitoring to help them get to know themselves as learners. This way, academic development is more likely to occur, specifically in the area of language learning. For instance, Chuk (2003) reports on metacognition carried out through exploratory practice where students' engagement was evaluated following Sinclair's framework.

It is also believed that the teaching and implementing of metacognitive strategies oriented towards the learning process contribute to the improvement of students' linguistic skills (Nakatani, (2005). For instance, Dafei (2007) indicated that after analyzing proficiency tests, questionnaires, and interviews, it was possible to acknowledge a linear correlation between students' autonomy and proficiency when the latter did not demonstrate a significant difference. Dafei found that the more autonomous a learner becomes, the more likely he or she is to achieve high language proficiency (p. 13). In addition, these findings were consistent with the teacher's own perception of students with higher proficiency, who "had a strong awareness of self-planning, self-management, self-monitoring and self-evaluation." This is in contrast to students with lower proficiency, who were "less confident, passively involved in the classroom activities and lacked control over learning" (p. 15).

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Golonka (2006) also links learners' awareness to linguistic competence. This study indicates that students who developed metalinguistic skills by implementing self-monitoring strategies at the level of correction and repair were the ones who demonstrated a

"gain" in their performance. Golonka also concludes that "the more self-corrections and repairs that were used by the learner, the greater the gain he or she achieved" (p. 503). These gains are attributed to the positive behavior of executive-thinking processes.

Technology

For the purposes of this research, it is important to point out that Computer Assisted Language Learning, or CALL, seems to demand more responsibility on behalf of the students. Beetham and Oliver (2010) talk about a new paradigm where the management of digital forms of information requires everyone "to be independent, self-motivated and self-evaluating … (and) learning for life is no longer a policy buzzword but a requirement" (p. 158). This phenomenon also co-exists with individuals' social, cultural, and educational spheres. Educational institutions are being confronted by the learners' interest in the massive availability of resources provided by open content creators and online networks. At the same time, learners need to reflect on their practices as well as their management of technologies and sources. Nevertheless, both institutions and learners may fail to account for the latter's ability to cope with information. The role of the teacher is then critical in order to offer accompaniment, support and preparation. According to Hubbard, this implies being aware of what is to be done, the reason behind it, and how to make it happen (as cited in Levi & Stockwell, 2006).

Jones (2001) highlights precisely the key role played by the teacher in fostering autonomous behavior. He depicts four major constraints on the use of CALL to promote autonomy: the lack of technical competence, the lack of interest, disinclination to be autonomous, and poor interaction on the part of the learner. Jones also points out the importance of a 'CALL pedagogy' or training for the teacher to anticipate learners' needs.

This is consistent with the research carried out by Ying (2002) which evaluated a syllabus oriented to improve students' proficiency and foster autonomy through enhancing the use of technology. The author demonstrated that "infusing technology in the classroom may significantly contribute to the growth in learners' motivation, autonomy and thinking skills" (p. 35).

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Regarding the selection and use of materials, they may also help to enhance the student's individual learning experience as well as the institution's expectations of the language program and the course

(Dudeney & Hockly, 2007). This is consistent with what Healey (2002) found after designing a course called Individualized Directed Learning, which incorporated the use of computers and videos to the conventional offering of textbooks, assistants, and speaking groups. Healey concluded that even though technology is not a solution on its own, it does provide a great deal of resources and potential in order to create an effective autonomous learning environment.

To sum up, it is possible to claim that this research is consistent with Rubin's (1975) vision of a good learner as "one who sets his or her own direction and takes responsibility for his or her own learning" (p. 44). The research also argues for developing metacognitive skills, tracking and assessing learners, and identifying learning styles. In addition, CALL allows students to explore the plethora of resources available on the Internet, and thus multiply the possibilities of identifying web tools that suit their learning styles and preferences. Provided appropriate training and engagement, students may also be able to construct effective, solid, and consistent study habits.

Methodology

Research Design

Action research regards problem solving and reflection as key factors. Mills (2007) defines action research as a "systematic inquiry (…) to gather information about how schools operate, how they teach, and how well their students learn" (p. 5). Cohen and Manion (as cited in Rodriguez 2007) highlight that "action research takes into account situational, collaborative, participatory, and self-evaluative aspects" (p. 236). The pedagogical intervention described below required the team to constantly observe students' behaviors and attitudes in order to make decisions.

A careful and structured reflection to air and discuss (Wallace, 1998) the steps to take facilitated the smooth implementation of activities in the classes and enabled the researchers to gather more reliable and comprehensive data. In sum, as Mills (2007) puts it, the data are collected "with the goals of gaining insight, developing reflective practice, effective positive changes in the school environment (and on educational practices in general), and improving student outcomes and the lives of those involved" (p. 5).

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Setting and Participants

The participants in this project were a group of thirteen students in first semester of an undergraduate bilingual education teaching program. The students were enrolled in two courses simultaneously, English I and Practice of Autonomous Learning as part of the program for first semester. However, almost all the students had started previously in an introductory semester designed for students who lack enough linguistic proficiency in English to face the challenge of taking content classes in English.

In terms of technology, it was decided to use Internet tools as a means to support students' experience and also to foster connections with yet another course students were taking, called Educational Technology, which was taught in Spanish. This course is intended to enhance basic ICT skills through tasks that are mostly oriented to affect the different learning processes undertaken throughout the program.

Data Collection Instruments

Surveys and field notes were used to obtain students' insights about the experience. This was due to both their rigor and flexibility in allowing for a comprehensive treatment of the data. Two surveys were administered at different stages. First, the institution had designed a questionnaire type survey format with open-ended questions in order to collect students' perception of the classes offered halfway through the semester. The survey requires students to report what they find useful, what they like best, and any suggestions they might have for the instructor. At the end of the process, students were asked to take another survey. This survey followed a semi-structured format designed to specifically address the multidisciplinary experience. It included questions about the nature and impact of the activities carried out, students' linguistic skills, and their perceptions about the use of technology and the experience as a whole.

In addition, further evidence was provided via e-mail on a weekly basis. At the end, participants were also asked to write a reflection that summarized what the project meant for them. Finally, informal field notes were collected during class discussions in the autonomous learning class. This allowed the authors to gather students' comments and conclusions.

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Pedagogical Intervention

This was a project implemented in two separate environments where students were able to reflect on their English learning process.

First, students were introduced to the reference website Learning Environment (Suarez, 2011) with the objective of establishing a space for all the dynamics taking place. Students identified the areas they wished to focus on based on their weaknesses or interests. The website was designed to include a blog and other complementary resources with the aim of supporting the tasks learners decided to undertake. The blog entries contained links to and a short description of websites to study English. To facilitate exploration and decision making, the entries were organized by tags that indicated the skill or area of focus.

In addition, during the weekly two hour sessions of the Practice of Autonomous Learning class, students took part in activities aimed at helping them develop their sense of responsibility towards their learning process, specifically following Scharle and Szabó's (2000) ideas on raising awareness as the first stage. The activities were directed at helping students discover more about themselves as learners, recognizing their strengths and weaknesses, and exploring some of the skills likely to help them succeed as English students and future teachers. This was done by supporting the use of learning strategies, specifically setting objectives, planning, self-evaluating, cooperating, as well as understanding the hidden intentions of tasks teachers propose.

There were also discussion and reflection sessions to familiarize students with sets of practice routines that provided a connection between the websites and the autonomous work. Since it was the first time students went through an experience like this, it was necessary to take into account what Scharle and Szabó (2000) indicate about fostering responsibility as a first stage in raising awareness. This is because it is assumed that students may not be very responsible at the outset.

As a parallel exercise, in the autonomous learning class students were given instruction on how to write a reflection. They were asked to account for their inner speech, explaining first the objectives they had in mind, the steps they undertook, and the reasons why they accomplished or omitted certain actions. They were expected to go beyond the intrapersonal discourse to integrate their personal and academic experiences in their language and make connections between the subjects they were studying, the academic language, learning strategies, and concepts studied in both classes.

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In relation to the suggested length of each day of practice, cognitive pedagogy theories (Sousa, 2006) were taken into account to offer the brain "short and, of course, meaningful" opportunities to make sense of the new information and retain it by creating moments for mass and distributed practice, the latter being "key to retention." Consistently,

the aforementioned samples took no more than 20 minutes of practice in order to make sure the down-time, that is the time during learning "when it is more difficult for retention to occur" (p. 89), is close to 10 percent of the time devoted to practice.

A major component of students' independent work relied on the need to make sure there was something observable at the end of every moment of practice. As a parallel activity, it was also important for them to describe how comfortable the practice was every day, so they could acknowledge the extent to which they may have struggled dealing with new input. For eight weeks, the group sent files on a weekly basis where this evidence was articulated, but during the last two weeks of the project, they made their own decisions regarding a new series of objectives, websites, resources, sequences of work, evidence, and reflection.

Data Analysis and Interpretation

The criteria used to assess activities was mainly based on students' preferences, self-assessment, the sensation of progress derived from doing the activities for ten weeks, as well as students' performance during the English class. The information obtained underwent a process of triangulation, described by Hopkins as the action of "contrasting perceptions of one actor in a specific situation against other actors in the same situation" (as cited in Koshy, 2005) to obtain insight in order to find emerging patterns. Ideas considered to be associated in significant ways were clustered together, as Stringer (2007) suggests. Other factors considered included the times in which students made their understanding of the purpose of the activities explicit, as well as their willingness to continue using them or transferring them to other learning processes.

Results

The information gathered throughout this project reveals that the activities designed to be completed independently had an overall positive impact on students. This impact can be seen in both operational and attitudinal aspects, operational in the sense of the practical actions they carried out and attitudinal as they guide their own actions.

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Students acknowledged the importance of having routines and acquiring good habits. They also realized that a stricter observation of their free-time activities made it possible to achieve what they had in mind. One student claimed,

> This work is based in your responsibility. The next time I want to be more commitment with my autonomous learning (..) I will be more demanding with myself.

When asked about what had been learned in the course, one student stated that the "different methods to study" was just as important as "grammar to improve my writing" or "to relax." In sum, they not only developed their linguistic abilities, but there was also a transfer of the experience to their daily life.

Being able to manage their time turned out to be a critical factor in their reflections at the end of the process and probably the most important for some of them. For instance, one student stated:

> I can improve every day if I practice; or if I effort myself, I'm going to continue have good results as now.

This may also be related to practical purposes. In one of the reflections, another student commented about thinking about the time to study English.

> I had to leave some TV programs. It was hard but now I can see the reward, it is my knowledge and nobody can take it away from me.

This means that as students were mainly interested in improving their language proficiency, they also thought that they had to be organized with their time so they could look for different opportunities to practice. As one student put it, in this experience "students use very well the time to study (so) I learn to take control of my time and take control of (my study)." Figure 1 lists those activities from the Practice of Autonomous Learning class that had the most positive impact amongst students.
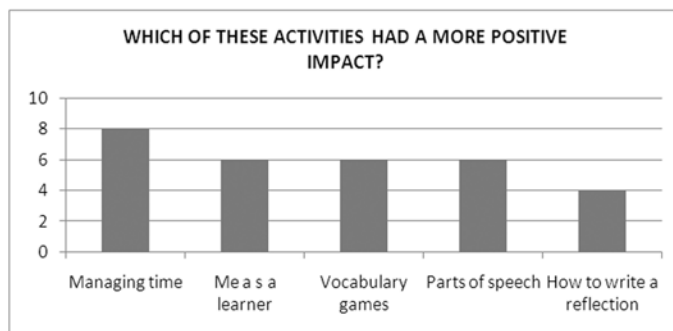
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Figure 1. Activities that had a more positive impact amongst students

Although students were offered a variety of possibilities to choose from to practice their language skills, they leaned towards activities to improve their pronunciation and listening abilities. In addition, students believed that if they could understand ideas and make themselves understood knowing when to use the vocabulary and expressions they had learned, there would be certain evidence of progress in their learning of a language. All in all, students saw their progress in terms of the completeness of their understanding and their effectiveness in expressing ideas. In other words, they were focused on accuracy. This is clear evidence of what Zimmerman discusses when characterizing self-regulated learners (1990). These learners can be identified by their awareness of performance outcomes and by their adjustment of their performance to changing conditions before getting feedback from their teacher.

Regarding the reflective processes carried out by students, there is some variation in students' perceptions. They recognized that reflecting was vital to help them focus, evaluate their learning process, and make decisions. Surprisingly, less than half of the students considered instruction on how to write a reflection the most useful activity. This suggests that students were more interested in activities which may have had a concrete and immediate application. It also suggests that teachers should think of and implement other ways to address this issue.

Students considered some activities useful to promote linguistic awareness, such as vocabulary games, learning parts of the speech, prefixes, suffixes, and guessing meaning from context. Students reported that these were very useful since they can "develop the ability to think faster," look for different possibilities to convey meaning, play with the language, go beyond translation and fixed structures, and see the language from a more realistic perspective. Learning the language is, according to one of the participants, "learning vocabulary and some grammar and being able to communicate with other classmates, making yourself understood." Students acknowledged that knowing some specialized linguistic terms also made them more independent, as they were able to look for information by themselves, know what to ask for, and even start approaching the language from a future teacher's perspective. Evidence of this was the gradual acquisition and use of metalanguage by students. They used terms similar to the ones teachers used to refer to their activities or the aspects they had to improve. For instance, one indicated that she can now "differentiate between if a sentence is fused or splice."

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Participants also acknowledged that metacognitive dynamics, namely being able to monitor their mistakes, self-assess, and have

control over their actions, helped them in their language proficiency and their learning process. What is more, they pondered how they could make use of these skills in other scenarios. For instance, one student said:

> I think that I'm going to continue work in those skills in my vacations because I want to prove if I can work autonomously without any teacher in the two months that we have.

Another claimed, when being asked about the possibility of continuing working in this way, he wondered if the use of these dynamics in other courses (including English) could bring the same "unimprovable results, well then welcome this method to the other courses."

It is worth mentioning that when asked about what they had learned from the experience, the participants in this study made explicit that they placed value on making an effort and being responsible and consistent if they were to achieve the desired results. At the end of the process one student stated the following:

> I have to say that there were cases where the exercises were difficult, but I also have to say that those were the exercise more useful and interesting for me.

Another student highlighted for instance, "My process have been very productive. I can speak more naturally." Although it might seem obvious to some adults and almost every teacher that effort pays off, the majority of the participants, being 16 to 20 years old, asserted that they were aware of the connection between effort, consistency, and achievement. After asking what was learned aside from English during the project, one student indicated that independent work was necessary to improve any skill, and commitment was necessary to see good results. Another concluded the following:

> I realize how important is to be focused and motivated...and practice -but real practice- because when you talk you say that to learn a language you need to practice. You really have to do it.

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Furthermore, participants reported that during this experience they started to question their own performances and procedures since they noted their self-assessment was more informed and objective. This can be linked to having certain control of their learning process. At the end of the process, one student claimed that the experience helped to be one's own monitor, finding mistakes and, "more relevant," giving a solution to them. However, beyond that, what the evidence reveals is

that the feeling of reward and self-satisfaction may be a key aspect to the maintenance and continuity of their actions.

The role of technological tools throughout the project, and the impact they caused amongst students were in general terms positive. Consistent with the findings from Kurec's research (2002), the merging of technology in the routines contributed significantly to the growth of the group's motivation. At the end of the process, there were no participants who indicated they had a negative perception of the implementation of technological tools. Figure 2 indicates how neutral or positive this impact was.
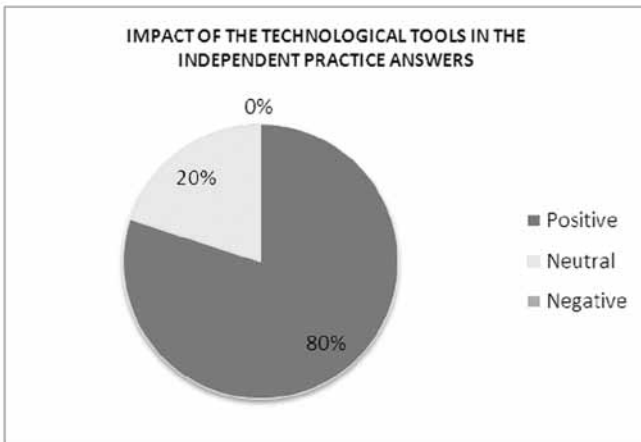

Figure 2. Impact of technological tools

Finally, another aspect that emerged was students' appraisal of the teacher's performance. First, they appreciated it in the sense that they received useful explanations about the topics and that the teacher tried many strategies to help them reach understanding. One student stated that he liked that "The teacher wants us to be independent (and) gives tips to monitor ourselves." Second, they recognized the teacher's feedback and comments on what was accurate or inaccurate as being very effective. They also found that more than looking for information about students' performance, the teacher was really concerned about their progress. Finally, they used the advice provided to continue, complement, enhance, or change the activities they had chosen.

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"At the beginning I didn't really know what to do but I asked the teacher for more help and I received more practice exercises to practice easier sounds... (and) then I understood the position of the lips. You need to

know that to pronounce well. You listen and you don't pronounce well. I think that Mario's comments are very important; he gives good ideas on what I can do."

One more finding that was revealing has to do with the attitude towards the project. At the beginning of the process, students made their decisions mainly to meet the challenges posed by the teacher. However, the answers they provided in the middle of the process and at the end show that some students, besides keeping the idea of meeting these challenges, were concerned about their own improvement and started to adapt their actions based on what they considered to be useful and rewarding.

As intended at the end of the intervention, some students proposed their own new activities; some of them kept the same objectives but came up with new ways to achieve them, while others tried new ways to make their processes more dynamic and enjoyable. Students based their decisions on the effectiveness or variety of the activities and none of them discarded the procedures as being useless. These findings show clear consistency with the beginning of becoming independent, sharing responsibilities in their learning process, and transferring roles (Scharle and Szabó, 2000). This evidence leads to think that students are functioning at the first stage of developing autonomy.

Conclusions

Integrating the use of metacognitive control strategies, independent activities enhanced by ICT tools within the context of language learning for beginners not only contributes to the development of student's language proficiency, but also provides them with insights of themselves as learners. This experience can be transferred to other situations of learners' academic lives and is key to long life learning. The processes undertaken during this project provide a basis for the internalization of a set of practices proposed to address learning challenges as a metacognitive approach that may contribute to making students become self-regulated learners.

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An important aspect observed throughout the intervention was that even though all the students showed improvement in their second language level, not all of them reached the stage of awareness to the same degree. It is possible to assert then that there are stages within this stage of awareness that are closely related to students' sense of responsibility, commitment, consistency, and good performance. Further study will be required to characterize what is actually needed

to maximize the benefits of the process. Being aware of one's learning process is, all in all, a sign of being a self-regulated learner who has started to naturally undertake autonomous attitudes and behaviors.

Due to the parallel activity in both classes during the project, the time participants spent in the English I class getting familiar with the dynamics and carrying out the suggested step-by-step work routines in the websites did not correspond to the time students spent developing their skills to be both attentive and descriptive when observing their own performance. There were exercises that were designed to approach and foster perception and awareness amongst students in a scaffolded way. Nevertheless, the nature of some sequences invited students to notice changes in perception and behavior from the very beginning, and the few sentences they created to describe that perception were not very informative. As this was the first attempt to combine efforts, the experience also suggested an evaluation and restructuring of the dynamics proposed in both environments to distinguish a clearer path to a real changing of habits and behaviors (Scharle & Szabó 2000) in favor of a development of learning responsibility.

Another issue that may have interfered in the nature of the data collected and the entire experience of the participants during the project is the fact that learners were working towards grades in both classes. It is clear that students care about getting at least a passing grade, consistent with Sekiguchi (2011). Students were required to submit reports and take surveys as part of the requirements of the English course, and yet, demonstrated an ability to self-regulate their own learning.

Another issue is related to web service providers. The project was originally designed in an online social network that was free-of-charge in order to create a sense of closeness, comfort, and belonging amongst participants. However, the contents had to be migrated when the free service expired. This inconvenience required looking for other options. It is advised to look for an LMS like Moodle if a similar effort is to be undertaken since it offers the possibility to carry out all the stages and establish a smooth communication with the participants. It also allows for the integration all the components and resources the project entails.

Finally, it is not possible to state that students have already internalized processes; however, there is strong evidence that this project contributes to being on the right track as students are likely to evidence a natural exercise of autonomous behaviors and attitudes. This leads to pose the need for an extension of the project in the remaining English courses of the institution's program.

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