



## Innovation, Engagement, and Learning: Do They Always Go Hand-in-Hand?

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### Abstract

*The purpose of this presentation is to propose the inclusion of visible scaffolding models in teachers' innovations using ICT for language learning to enhance students' engagement for learning. Both common beliefs and existing literature support the promising impact that the use of technological tools has on the motivation and learning of so-called "digital natives". This makes it fairly easy to understand why language teachers see technological tools as superb allies in ensuring better results.*

*Additionally, in our context as teacher educators accompanying teachers- in-training in their research projects required for Master's Programs in English Language Teaching for the past six years, the authors have observed that there appears to be a generalized underlying belief that the implementation of an ICT-based strategy will necessarily contribute to students' motivation, engagement, and learning. Teachers' interest in the topic stems from needs such as complying with legal requirements, solving class management problems, addressing paradigm changes in education, and tapping into students' natural interest in technology. More important, though, is the goal of transforming the poor results that prevent our students from becoming more competent and competitive in the globalized world they must confront.*

*Surprisingly enough, the results of their research are somewhat unexpected. Their students tend to evaluate the interventions very positively, saying that they enjoy the activities and feel that they learn a lot, but neither their participation, nor their outcomes reflect the desired impact. While there does seem to be some progress in their motivation and learning outcomes, it has not been easy for teachers to track this progress and attribute it to the implementation as such. Therefore, teachers' efforts and innovation do not always contribute to significant transformations in their institutions.*

*In light of this situation, the authors engage in a more critical look both at the documented effects of the use of ICT in learning, especially language learning, and at their students' research experiences in order to propose strategies that may take advantage of the affordances of technological tools, enhance teachers' initiatives for integrating technology in language teaching, and contribute to the creation of meaningful learning experiences for students.*

### 1. Introduction

The need to help students develop competences for the 21st century in the globalized world underscores the importance of learning other languages. The development of technology has, in turn, brought new challenges and opportunities for the field of language teaching and learning. The affordances of technologies in this area transcend the opportunities offered in even the most privileged classrooms blurring equity barriers in terms of resources to offer the best learning experiences to all. The possibilities ICTs offer provide for almost everything teachers and learners have to deal with in the complexity of learning (i.e. learning preferences, teaching pedagogies, content needs, learning goals, culture, and even curriculum planning and the making of policies). In the same vein, ICTs allow the integration of proven theories (i.e. behaviourism, constructivism, cognitivism, connectivism) and principles (i.e. student-centered learning, collaboration, active learning, differentiation, visible learning,) that account for what works in learning in general. In the field of language learning, Robert J. Blake (2008) points out that "technology opens the door to an untapped potential" (p. 11) [1] both for improved learning experiences and for language use. However, there will only be a positive effect on learning when teachers assertively ask good questions before engaging in technology-mediated teaching and search for insightful answers regarding proven factors that enhance language learning (interaction, motivation, time for learning, relatedness, creativity, attention to internal and external

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need, exposure to the language, etc.); these aspects are often neglected in classrooms, especially those with many students. As Hubbard (2015) states “It is also possible to see a dismal future for CALL, one in which technology remains weakly integrated, where research remains fragmented, underfunded, and institutionally undervalued”. (p.176).[2] The lack of a clear concept of what technology means for learning in general and for learning another language may lead to an unsuccessful introduction of technologies in the classroom. However, we strongly believe that both language teacher educators and language teachers should work in hand in order to avoid the negative results predicted for CALL.

Hubbard goes on to report on the lack of prepared teachers for CALL and the barriers that we believe currently exist for a better future for CALL. Among those is the underrepresentation of CALL in the curriculum in under and postgraduate studies. Curriculums are fragmented according to the professors’ specialties and student-teachers have, at best, one course during the program. It is perhaps in that course when teachers identify their interest in technology-based solutions for their classes. The cases presented below demonstrate some results of a fragmented integration of CALL in language programs for in-service teachers.

### **2. Genesis of the Problem**

In our context as teacher educators accompanying teachers-in-training in their research projects required for Master’s Programs in English Language Teaching for the past six years, the authors have observed that there appears to be a generalized underlying belief among our students that the implementation of an ICT-based strategy will necessarily contribute to students’ motivation, engagement, and learning. Teachers’ interest in the topic stems from needs such as complying with legal requirements, solving class management problems, addressing paradigm changes in education, and tapping into students’ natural interest in technology. More important, though, is the goal of transforming the poor results that prevent our students from becoming more competent and competitive in the globalized world they must confront. When they are carrying out their research to those ends, these teachers develop some more understanding of what integrating technologies entails.

The authors collaboratively studied 4 research projects of Masters students to identify their general characteristics and results. From these cases, the researchers established some commonalities that point to positive outcomes of these teachers’ research processes. It is interesting to note that, contrary to what is reported in research, these teachers are eager to use technological tools in their implementations. They also showed a great deal of commitment to their projects and designs.

There were also, of course, some difficulties that seem to stem from the fact that teachers believe that because students are motivated to use technology and because the interventions use ICT tools, learning will naturally result. Thus, there is a lack of clarity regarding the purpose of the intervention. The technical issues and teacher and student skills regarding the use of ICT tools and the fact that the projects are voluntary, may also constitute significant barriers. The results of the analysis are presented in Table 1.

In all the experiences, the process seems to flow more smoothly when student and teacher work is visible, as this shows objective reflection tied to teacher practice and student performance. The experience also provides the teacher with examples as to how technology can be used in his or her own practice.



Table 1. Positive aspects and difficulties found in 4 research projects of Master's program students.

ASPECT OF THE PROJECT	POSITIVE FINDINGS	DIFFICULTIES
Needs analysis	<ul style="list-style-type: none"> <li>- Instruments are applied to detect needs.</li> <li>- Thorough formal needs analysis leads to better perceptions about the intervention.</li> </ul>	<ul style="list-style-type: none"> <li>- Superficial or teacher interest driven needs analyses.</li> <li>- At times, researchers do not modify their initial perceptions despite conflicting information.</li> </ul>
Rationale for using ICT tools	<ul style="list-style-type: none"> <li>- Teachers show desire to innovate and engage students with tools.</li> <li>- Teachers are willing to take risks and explore new strategies to enhance student learning.</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of clarity regarding justification of choice other than theoretical bases.</li> <li>- Mostly teacher-determined decisions.</li> </ul>
Design	<ul style="list-style-type: none"> <li>- Dedication of a great deal of time and effort to making their own designs and adaptations.</li> </ul>	<ul style="list-style-type: none"> <li>- Time-consuming work</li> <li>- Lack of criteria or neglect in assessing available resources.</li> <li>- Tailored designs may distract researchers from contributing to students' learning.</li> </ul>
Engagement	<ul style="list-style-type: none"> <li>- Most participating students report enjoyment and engagement with the materials.</li> </ul>	<ul style="list-style-type: none"> <li>- Despite students' positive comments, unless teachers are monitoring very closely, participation is very low.</li> <li>- There is a lack of autonomy and persistence among students.</li> </ul>
Focus on learning	<ul style="list-style-type: none"> <li>- Most participating students report that the material helped them make progress in learning English.</li> </ul>	<ul style="list-style-type: none"> <li>- Teachers have difficulty articulating learning goals and assessing if they have been achieved.</li> <li>- Results regarding learning are often discrete.</li> <li>- Learning may be seen during the process but is not maintained in the final results.</li> </ul>
Results	<ul style="list-style-type: none"> <li>- Teacher and student perceptions of the experience are quite positive.</li> </ul>	<ul style="list-style-type: none"> <li>- Results are difficult to ascertain and attribute to the intervention.</li> <li>- Online work is difficult to track and analyze.</li> <li>- Results are not aligned with what teachers expected or proposed.</li> </ul>



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In general, our students are dedicated teachers who are very interested in their students' and their progress. They are well-intentioned and seek to transform their practices and their students' results by integrating technological tools into the language learning process. However, we feel that they are affected by what Arnold (2007) refers to as a "utilitarian attitude toward technology: Many foreign language teachers focus on the convenience that computers can provide themselves and their students. (...) computer technology is often used to assist instruction rather than to promote learning." (p. 174)[3] Teachers see that technology is attractive, they "buy in" to the myth of students as "digital natives", and consider that using it to enhance teaching, will engage them, and "automatically" support learning. They fail to realize that what underlies the effective use of technology in education is really sound pedagogy and that issues such lack of equipment, connectivity and skills must be addressed in order to set the stage for effective learning.

### Recommendations

We would recommend then, that teacher education courses should include scaffolding processes that help teachers decide the best options for interventions with their students, with the appropriate and relevant uses of technology. Additionally, the teachers will also experience the incremental process that will support their own learning and allow them to offer something similar to their students.

Based on the difficulties perceived in the analysis presented above and our study of literature related to the topic, we consider that the in-service teachers in our Master's program can benefit from more purposeful scaffolds within the accompaniment structure of their research process. In agreement with Brown and Cherkowski's (2011)[4] premise that "it is difficult for teachers to create, for their students, experiences and social conditions they have not experienced for themselves" (p. 63) we feel that sustained scaffolds – understood as "bridges" that support teachers' reflections while they build upon what they know and transform their practices and beliefs – are indispensable to help teachers who should be "moving toward student ownership of learning are inquirers themselves—constantly curious and empowered to ask questions as well as seek and share answers applicable to their practice, scaffolds new instructional behaviors and helps develop the beliefs that will sustain those practices" (p.65) Thus, we are confident that scaffolds such as those we present in Table 2 will contribute to our teachers' ownership of their learning, engage research that is relevant to their contexts, transform their beliefs and practices and, through innovations that they lead, contribute to lasting change in their communities.

This entire process undoubtedly requires transformations in us as teacher educators as well. According to Hubbard, in programs where there is a fragmented approach and little time devoted to reflections regarding the use of technology, the research portion of the program becomes a vital space for real learning to occur. While working on their projects, students come to realize the importance of pedagogy in the design and use of technology in their classrooms. In order to mentor teachers adequately throughout the research process, tutors should work collaboratively with technology and inquiry experts and also develop skills in those areas themselves in order to support their teachers appropriately.

Based on the difficulties encountered, we propose the following areas of the research projects in which scaffolds, provided by teacher educators and made visible through the mindful use of technology might provide relevant guidance for teachers based on their particular contexts, needs and practice

In concluding, then, we consider that a Master's program that seeks to empower in-service teachers to integrate technology in their language teaching practice in order to help students to learn how to learn a language, should include a scaffolding process that begins early in the program and contributes to the development of the teachers' awareness. Starting with reflections about the context itself, there should be a consistent effort to create a culture of sustained, integrated, and enriching reflection on current practice, reflection on learning how to use technologies and the learning that can come about through the use ICTs, and that can help all learning agents keep track of and improve the process and the results. This type of approach may truly have an impact on student learning and institutional transformation.



Table 2. Recommended scaffolds for supporting in-service teachers' research projects in Master's program.

AREAS	PURPOSES
Students' actual needs	<p>What do my students really need?</p> <ul style="list-style-type: none"> <li>- Ask themselves and others good questions about the context, students' needs and wants</li> <li>- Delve deeply into the answers to determine what they mean</li> <li>- Assess student access and skills for use of technology.</li> </ul>
Purpose of the intervention	<p>What do we want to achieve? How can technology help us achieve that goal?</p> <ul style="list-style-type: none"> <li>- Determine clearly what they want to achieve, how they can achieve it, and how they will know if it is achieved</li> </ul>
Best tools for the task	<p>How can technology help us achieve that goal? Which ICT tool(s)?</p> <ul style="list-style-type: none"> <li>- Explore why technology might be a good option and why it is superior to other strategies.</li> <li>- Explore existing resources and determine if they can be adapted or adopted instead of designing from scratch.</li> </ul>
Monitor, reflect on practice and scaffold.	<p>What are students doing? How can I help them?</p> <ul style="list-style-type: none"> <li>- Monitor participation closely and make necessary adjustments to ensure that students are really using the tool and doing the work.</li> </ul>
Reflection on learning and for learning	<p>What are we learning? How do we know?</p> <ul style="list-style-type: none"> <li>- Make thinking, learning, and results visible.</li> <li>- Ensure that students can see their progress and the advantages of using the tool.</li> </ul>
Reflection and Growth	<p>What happened? How have we grown? What should we change?</p> <ul style="list-style-type: none"> <li>- Constant reflection on the process that will allow for explanations of partial results and timely adjustments.</li> </ul>

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## References

- [1] Blake, R. "Brave New Digital World", Washington, D.C., Georgetown University Press, 2013, 240 pp.
- [2] Hubbard, P., & Roblyer, M. D. "Teaching and learning with technology for foreign and second languages". In M. D. Roblyer, Integrating educational technology into teaching (7th ed.), Boston, MA: Pearson Education, 2015, pp. 284-304
- [3] Arnold, N. "Technology-Mediated Learning 10 Years Later: Emphasizing Pedagogical or Utilitarian Applications?" in Foreign Language Annals, Vol 40, No.1, 207, pp. 161-181
- [4] Brown, W. & Cherkowski, S., "Owning Our Learning: Scaffolding Professional Inquiry for Educators", in LEARNing Landscapes, Vol. 4, No. 2, Spring 2011, pp. 61-78.