Emergent Technologies and Pedagogical Approaches in the XXI Century: Contextualization and Adoption

Jorge Aguilar-Sánchez
University of Dayton, U.S.A.
jaguilarsanchez1@udayton.edu

Abstract

The present paper stems from three findings on the use and adoption of technology and the need for a systematic approach to the adoption of emergent technologies for the teaching of world languages. I address the question of how to contextualize, from a pedagogical standpoint, technological advances in the language classroom. I address the issues of what characteristics are present in emergent technologies that allow students to be engaged in, in and outside of the classroom; the question of the types of technologies that learners prefer to be engaged in outside of the classroom and how they match our pedagogical approach; and their implementation for the facilitation of instructed second language acquisition.

Key words: pedagogical contextualization, emergent technologies, pedagogical approaches, second language acquisition

1. Introduction

In Aguilar-Sánchez and Donar (2014), we argue that one of the struggles we face in an era of technological innovation is the fact that younger generations of students are tech savvy and demand access to information in real time. Furthermore, researchers have found that emergent technologies such as iPads increase student engagement and collaboration within the classroom by acting as a facilitator rather than a clunky barrier like some of the current technology that is used in classrooms (Rice, 2011), that technology can be used to engage students in reflection regarding their study habits and innovations such as online games have
served to reveal to students the inadequacy of their study habits or the incompleteness of their content knowledge and that these games have helped them reevaluate their study methods to better prepare themselves for exams (Paul, Messina, & Hollis, 2006); and that computers will not replace instructors any time soon; they are not better than instructors at delivering grammar instruction when using processing instruction, and that some grammar instruction could be removed from the classroom and placed on the computer (Aguilar-Sánchez, McNulty, & Lee, 2007).

The present paper stems from three findings on the use and adoption of technology, and the need for a systematic approach to the adoption of emergent technologies for the teaching of world languages. I address the questions of how to contextualize, from a pedagogical standpoint, technological advances in the language classroom, and whether they match our pedagogical approach. Finally, I conclude with general guidelines for points to take into consideration in the implementation of these technologies in the classroom and their use to facilitate instructed second language acquisition.

2. Previous Studies on Emergent Technologies

Studies on the role of technology in the classroom have centered on particular technological advances (i.e. emergent technologies). Very few of them have investigated the role of the pedagogical approach in the selection and implementation of such technologies in the classroom. So, the studies presented here serve as exemplary work for the contextualization of emergent technologies in the classroom. There are four major areas in which studies can be categorized: specific technology, interactivity, learning management systems, and pedagogical approaches and student engagement.

2.1. Specific Technologies

iPads

In the past four years or so, iPads have become very popular in classrooms around the United States. Rice (2011) makes a summary of what some colleges have learned through their experimentation with iPads. She mentions that some studies show that iPads increase student engagement and collaboration within the classroom, saying that they acted as facilitators rather than clunky barriers like some laptops in a group setting. She noted that observers to the classes that use iPads reported that students with iPads seemed to be more engaged in classroom activities. Others, she reports, see the value on the ability to transport the iPads as a tool onto field trips and in other group settings.

Rice (2011) also presents people’s perceptions of problems with the iPad. Some students, she reports, said they preferred pen and paper to the iPad and that it was a hindrance for taking detailed notes and drafting papers. No actual data from the research presented by Rice (2011) was provided; however, the pros and cons of using iPads are visible and informative for the purposes of the present work.
Work (2014) works with the selection of iPad apps that work for a proficiency based lesson. She cautions us that it is crucial to understand that technology in general, and iPads and apps more specifically, should not merely be used for technology’s sake, but that they need to support the course or lesson objectives. She continues by stating three points to take in to account. The first one is that any work done with the iPad should be carefully integrated into existing lessons and curricula. The second one is that it should fulfill a clear pedagogical objective. She continues by stating that teachers need to test and evaluate apps for appropriateness in terms of content and student age and be familiar with how to use the app and its features in order to be able to explain it to their students. She concludes that one of the most important goals in foreign language education is to encourage our students to learn to use language for real-life communication and that utilizing apps and iPads in and outside of the classroom can serve a variety of objectives. These include the use language for a real purpose; practice a variety of skills, get learners ready for the 21st century, foster creativity and individuality, and encourage higher-level problem-solving and critical thinking skills.

2.2. Interactivity

One characteristic of interest in the present work is the interactive nature of emergent technologies and this characteristic can be used to enhance student learning.

Paul, Messina & Hollis (2006) assessed the effectiveness of a game they created called PsychOUT!, which was used as a study tool. They wanted to see whether it raised students’ exam scores and changed their study habits as well as to survey the students’ perceived effectiveness of the game. The professor had the students play the game during the class meeting before the exam. They analyzed exam performances during two semesters in four classrooms. Three were undergraduate general psychology classes and one was an upper level social psychology course. Students in the spring semester played the game before the first exam and students in the fall semester played the game before the second exam. For student evaluation of PsychOUT!, they gave the students a survey on the last day of class that included nine Likert-scale questions and six open ended questions. They were able to assess the degree to which students believed the game worked. Students could also give suggestions for improvement. Survey data was collected from 189 students. Researchers did not require all students to participate in the game day, but offered extra credit to those who did and used those who did not as a control group. 123 students played the game, and the other 66 students did not. To analyze the exam scores a 2 (game presentation) × 2 (participation) × 4 (exam) mixed factor ANOVA test was performed. They reported a significant main effect for participation, in which students who participated in PsychOUT! averaged higher exam scores (M = 72.7, SD = 15.9) than students who did not participate (M=61.9, SD= 14.5). They conclude that the surveys strongly indicated that the interaction with the game revealed to students the inadequacy of their study habits. In other words, it allowed students to determine deficiencies in their content knowledge. As a result, students reported reevaluation of their study methods to better prepare themselves for exams. Despite the design limitations in their study (i.e. lack of a real control group), Paul et al. (2006) represents an example of how by changing the pedagogical approach to a more student-centered one influences student success in learning and as a result in testing.
Bonds-Raacke & Raacke (2008) studied students’ expectations of the use of Tablet PCs within the classroom, students’ attitudes toward using Tablet PCs, and the resulting environment from the use of various technologies. They used two different questionnaires to evaluate students’ expectations and attitudes towards the Tablet PCs and other technologies used (Blackboard and PowerPoint). There were two different experiments performed. In experiment 1, there were 122 participants from two sections of Statistics and two sections of Intro to Psychology. No background data were collected. In experiment 2 there were 101 participants from the same classes, 28 men and 73 women. The mean age of all the students was 20.85 years. The demographics of the second experiment are as follows: 41.6% Caucasian, 29.7% African-American, 17.8% Native American, 5.9% multi-racial, 3.0% Hispanic and 2.0% Hawaiian / Pacific Islander.

Participants for experiment 1 in all four classes received a questionnaire the first day of class immediately upon arrival. In experiment 2, participants received a two-part questionnaire at the end of the semester. The first part examined students’ attitudes toward the use of technologies, just like the questionnaire from experiment one. The second part asked participants to respond to six statements about the class environment in general, resulting from the use of technologies. The results from the first experiment show that most students had a positive attitude towards using multiple technologies in the classroom. Eight out of the nine questions show this result. In the second experiment, all nine questions that students answered resulted in a positive attitude towards the use of technologies, even more positive than experiment 1. Students reported that it improved the interactive classroom environment and helped them become more engaged in learning the material. The authors concluded that results indicated that students’ use of technology not only enhanced the classroom experience, but that they benefited from using it.

In a similar study, Enriquez (2010) studied how tablet PCs and wireless technology can be used during classroom instruction to create an Interactive Learning Network (ILN) that is designed to enhance the instructor’s ability to receive active participation from all students during lectures, to conduct immediate and meaningful assessment of student learning, and to provide needed real-time feedback and assistance to maximize student learning. There were two different case studies in higher education campuses in the western United States. The author used a diagnostic test at the beginning of the experiment to see if there was a difference in prior student knowledge between the universities but there were none found. To study the impact of the ILN instruction model, there were two studies done. Study 1 compared two circuit courses at university one in the spring of 2006, which used the ILN model; and the spring of 2005, which was a traditional instructor centered classroom. The second study compared two circuit courses from the two institutions in the Spring 2006 semester, a class that used the ILN model, and a class that used the traditional model. The same instructor taught all four courses. In study 1 there were 41 students in the ILN section and 28 in the other. In study 2 there were 16 students from the ILN section and 46 in the comparison group. The demographics in study 1 were as follows: 36 male and 5 female in ILN section, 26.8% Asian, 22.0% Caucasian, 4.9% Filipino, 34.1% Hispanic, and 12.2% other; 21 male and 7 female in non ILN, 25% Asian, 35.7% Caucasian, 3.6% Filipino, 28.6% Hispanic, 7.1% other. In study 2 participants were 14 male and 2 female in ILN
section, 12.5% Asian, 25% Caucasian, 37.5% Hispanic, 25% Other; 38 female and 8 male in non ILN section, 4.3% African-American, 28.3% Asian, 17.4% Caucasian, 26.1% Filipino, 13% Hispanic, 10.9% other.

For each case study data were collected and compared through scores of students on 15 homework sets, four quizzes, four tests, and a final examination. A two-part attitudinal survey about the use of tablet PCs was administered at the end of class from the two experimental groups. Independent student t-tests were used to evaluate the statistical significance of the results. Each student in the two classes using the ILN model was given a tablet PC to use during lectures. Students interacted with the professor during lecture delivery by using NetSupport’s Instant Survey and electronic whiteboard features that allow participation from all students. Enriquez reports that students were given exercises to solve using the tablet PCs while the instructor observed and guided their progress and provided individual assistance through the NetSupport School software.

In the comparison groups, no tablet PCs were used. PowerPoint, blackboard and chalk were the main media used, making the class less interactive. He reports statistically significant changes in some categories, but not all. There is a significant difference between the 2006 and 2005 results in homework average and quiz average. The average of the four tests together from the two groups has no statistical difference, but there was a significant difference between the averages of Test 3 and 4. There is also no statistical difference for the final exam, but he notes that the corresponding average letter grade for the final exam was a “B” for the 2006 class who used the ILN, and a “C” for the 2005 traditional class. Results from the survey showed that students viewed the tablet PCs as helpful in improving student performance and the instructor’s teaching efficiency, as well as creating a better learning environment. The author also mentions that students responded to the open-ended questions with comments indicating that there was increased attentiveness and focus during lectures, real-time assessment of their knowledge through polling, immediate feedback on their work, increased one-on-one time with the instructor, ease of communication with instructor, and quick assistance when needed.

For the second study there were significant statistical differences in all categories except one. Students from the ILN class had higher quiz scores, overall test average, and final exam average. There was no statistical difference for the homework assignments. Enriquez summarizes that the interactive learning environment resulted in improvements in the student performance compared with the traditional instructor-centered learning environment. This can be attributed to the enhanced two-way student to instructor interaction, individualized and real-time assessment and feedback on student performance, increased student engagement, and enhanced and more efficient delivery of content. Enriquez (2010) is a very important study for the present investigation because without looking for key pedagogical factors that influence the use of technology, he discovered that by inadvertently changing his pedagogical approach with the aid of technology, his students were able to perform better in traditional tests.
2.3. Learning Management Systems

Nelson, Arthur, Jensen & Van Horn (2011) investigated ways to make students become more engaged with subject topics, how information could be presented in multiple ways, and how to collect information from students in various forms. They started with the idea that no textbook series met all of their criteria, so they decided to use digital resources instead. In order to achieve their goal, they created a virtual environment. The first stage was a storage and sharing platform where teachers could place their lesson plans, study guides, rubrics, PowerPoint presentations and any other necessary class information and/or materials called Curriculum Loft. The creation and use of such a virtual environment, they state, makes it clear to students and parents what is expected of students and explains how students are able to gain information and express their knowledge throughout the course.

The second stage was to find a reliable source for digital information. They opted for NetTrekker from Thinkronize, Inc. NetTrekker is a database of peer-reviewed digital resources that teachers can use. Teachers are able to search by age group and subject. The program also organized the information so they could see who evaluated each resource, the readability of the resource, the rating of the resource, teacher-recommended resources, student-recommended resources, or titles. They linked NetTrekker to the Curriculum Loft. Nelson et al. (2011) collected data through surveys given to students in middle and high school as well as teachers. Teachers reported that students were more likely to read or skim the articles while students reported higher interest in their subjects that used this method. Students’ responses indicated that they thought their courses were more relevant because they were applying more 21st century skills, such as problem solving and working collaboratively with others. Their answers also included their perception that because information was presented in a variety of ways, it allowed them to demonstrate their knowledge in a variety of ways.

Nelson et al. (2011) concluded that because students live in a digital world, they access information for personal use and move through a tremendous amount of data to find what they are looking for. The digital platform and database show how students can successfully use technology and provide flexibility for the teachers when it comes to planning and delivering information to the students. Currently, these types of platforms are called Learning Managing Systems or LMS. Among these platforms we find Moodle, D2L, Blackboard, Oncourse, and others.

2.4. Emergent Technologies and Student Engagement

Aguilar-Sánchez and Donar (2014) searched for characteristics, from a pedagogical point of view, present in emergent technologies that allow students to be engaged in their studies inside and outside of the classroom, and students’ preferences in regard to emergent technologies to be engaged in outside of the classroom. They studied data from students who completed an advanced Spanish grammar course (n= 63) at a Midwestern University in the United States. Data were collected over the course of six semesters. The authors stated that demographics were not collected due to the nature of their study.
They used an eclectic teaching approach called the PEER approach to the facilitation of second language acquisition (Aguilar-Sánchez, in progress). Four technological advances (iPads, SmartBoard, SmartPen, and Concept Maps through Prezi) were selected to create materials to engage students inside and outside of the classroom. Activities were created according to the characteristics of each of the emergent technologies that were selected. In their study, iPads were used as means to search information and sometimes to create materials in groups (e.g. picture story-telling, response to questions via Socrative, among other apps). They report that students were encouraged to use the iPads to study or to summarize the material for future reference. They also report that SmartBoard activities were created to present content in class and that these activities allowed students to interact with the content that was presented to them in the classroom, but not outside of it. Such presentations, they explain, included vocabulary games and jigsaw puzzles, among others. SmartPens, which are pens that allow for the recording of audio and the visual recording of your handwriting, were used as lecture-capture devices. A third technology included the capturing of lectures. They explain that lectures were captured with a SmartPen and were converted into what are called PenCasts. PenCasts are PDF documents with audio and interactive visuals of the user’s handwriting. Aguilar-Sánchez and Donar (2014) later uploaded recorded lectures into the Learning Management System called Desire 2 Learn (D2L) for students to use them for review or preparation for class. The last technology they used was Prezi, a presentation web-based program; and it was used to engage students in deep reading. Students were required to use Prezi to prepare presentations in groups of selected readings every week as they describe in their paper.

Data were collected via a preference survey in which the researchers asked students for the frequency in which they used, during the course, the technologies at hand and the usefulness, to the student, of such technologies. Their results show that students prefer technologies that allow for interactivity and immediate feedback for classroom work, and for engagement outside of the classroom they split between time spent on an activity and the availability of non-interactive activities. They present the following advantages and disadvantages of each emergent technology.

For PenCasts, they note that not only do they capture the explanation of the professor; they also capture the writing that is undertaken to explain it. They explain that this tool proves to be very powerful to help students revisit the lectures while also allowing them to revisit explanations. In addition, they state that PenCasts also serve as a source of audio to develop listening skills. All PenCasts were done in the target language. SmartBoard activities, as they point out, were interactive inside of the classroom, but non-interactive outside of it. However, they explain that students were able to view the material that was presented to them with all the annotations that were made in class and argue that students prefer this type of material because it triggers recall of the explanation or activity done in class. For Prezies, they describe that because they were done in groups; the negotiation of what went on in each Prezi and the value of the explanation for reading gained seems to be one of the reasons why students regarded them as useful. iPads, they discovered, were the least useful technologies due to the limitations they present. They argue that Instructors are tied to applications that sometimes cost money, and iPads also seem to be regarded as personal items.
and not learning tools. They suggest that future research should focus on the comparison of particular Apps and their pedagogical usefulness rather than the use of the iPad itself.

Aguilar-Sanchez and Donar (2014) conclude that while some students prefer interactive activities, others prefer the static material due to a preconception of the worth of time spent in the class, and that because each of the activities and the technology to deliver them were selected following a sound pedagogical approach, tied to a student-learning outcome, and to how it was going to benefit language acquisition; the pedagogical approach is still at the forefront of any decision-making regarding teaching. They explain that these technologies seem to have been selected because they were the ones, from a teacher perspective, that best matched the needs of the students. They suggest that to select any emergent technology, teachers must have a clear understanding of how such technology will aid the learner in the acquisition process, and not just as the means of instruction. Their suggestion is the basis for what follows in this paper.

Aguilar-Sanchez and Donar (2014) and Work (2014) share a characteristic of importance for this paper. They both call for the use of technology as an aid to fulfill our learning goal in the proficiency oriented language classroom and call to avoid the use of technology for technology sake.

3. Contextualization and Adoption of Emergent Technologies

Following the findings of recent research on the advantages and disadvantages of emergent technologies cited above, I present here a series of steps for the contextualization and adoption of emergent technologies to facilitate second language acquisition in the classroom. I provide examples from my own experience as a second language acquisition facilitator.

3.1.1. Step 1: Know your pedagogical approach well

For the purposes of this paper, I only present the reader with a summary of the eclectic pedagogical approach called P-E-E-R Approach for the Facilitation of Second Language Acquisition (Aguilar-Sánchez, in progress).

This approach is founded in the philosophy of education proposed by Piaget, Constructivism; the Communicative Approach proposed by Savignon (1972, 1976, 1997); Processing Instruction (Lee & VanPatten, 2003); and a sound and deep knowledge of assessment and measurement.

The word P-E-E-R stands for Preparation, Exposure, Enforcement, and Review. Learners are encouraged to be and must be prepared for specific class-content at home. What this means is that they must browse, look for familiar words, familiar structures, find new items, among other activities that will allow them to actively participate in the class. Learners must be exposed to the content as much as possible during the class period and outside of it. Facilitators must ensure that contact time includes enough exposure to the language and that time is managed to avoid gratuitous group work (Lee & VanPatten, 2003). Facilitators
must ensure that the target language is used at all times. At this point, I want to point out that it is not the facilitator’s use of the language that this piece of advice refers to, but the learner’s use of the language. The more learners use it, the faster the acquisition happens. We move away from the Atlas Complex (Lee & VanPatten, 2003) to a facilitator’s role in the classroom. This role also encourages collaboration and communication in the classroom rather than a passive/receptive role on the part of the learner. As facilitators, we must enforce language use and content review at all times. We must create meaningful activities and not mechanical drills. Homework assignment must be linked to the objectives of the class (i.e., meaning-baring activities) at all times. The classroom must be transformed from a teacher-centered/podium-centered classroom to a collaborative environment where language acquisition takes place. Activities must require the use of the target language outside of the classroom as well. Finally, learners must review and use old content during and after their first exposure (i.e., recycling). Recycling does not mean repeating content or explanations. It means the presence of old structures in new content carefully designed by the facilitator to promote the use of old structures and allow re-accommodation with the new one in learner language. Homework assignments must always have items that make use of previous content to provide an indirect review. In other words, there must be a sequence or path that will lead the learner to a clear goal, language proficiency.

The P-E-E-R approach relies heavily in three readings of content. These are not readings in the literal sense, but rather review and exposure to the content. The first reading happens during the preparation stage, the second during class time, and the third one happens during homework assignments. All three readings create a learning environment that facilitates second language acquisition (See Figure 1).

3.1.2. Have Clear Proficiency-based Student Learning Outcomes

Over the years, the term Lesson Objective has morph into different terms to represent the philosophy of education behind it. For the purposes of this paper, the term I use is Student Learning Outcome (SLO) to refer to the goals we set for learner’s performance at the end of each course. Some might know them as objectives, as learning outcomes, targets, or goals.
In short, SLOs must contain the When, the What, and the How of a learning lesson. They must be observable and measurable. Some researchers recommend the use of Bloom’s Taxonomy (Bloom, 1956) to find the different domains of higher-level thinking. My suggestion is to think of how observable the behavior is and ask yourself how you are going to gather the data to determine whether the outcomes are being performed. If it is difficult to observe, it is difficult to measure.

Student Learning Outcomes must be designed with the acquisition process in mind. We have moved from a Behaviorist approach to learning to a Constructivist approach to acquisition. Therefore, memorization of terms should not be one of our goals. Performance and proficiency-based goals should be the norm in our classrooms. The American Council of Teachers of Foreign Languages provides a set of guidelines of performance/proficiency-based description by levels. The European Common Frame of Reference also provides a set of performance/proficiency guidelines. Whichever you choose to follow, use them as your guide to the language acquisition stages and, when possible, as your base for establishing good SLOs.

3.1.2.1. The When

SLOs can be set for a particular lesson, for a unit, or for a semester. The higher the level, the more generic they become. Ideally, we would have General Outcomes per level and a more specific one for each course or lesson. Therefore, the time framework is very important because it tells us when we want to assess learning.

Examples of the When in SLOs are:

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>SLO Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. At/by the end of the 40 minute period,</td>
<td>Lesson SLO</td>
</tr>
<tr>
<td>b. At/by the end of the unit,</td>
<td>Unit SLO</td>
</tr>
<tr>
<td>c. At/by the end of the course</td>
<td>Course SLO</td>
</tr>
<tr>
<td>d. At/by the end of the Level/Sequence of Courses</td>
<td>Level SLO</td>
</tr>
</tbody>
</table>

The When is particularly important when creating Proficiency-based curricula because it provides the proficiency-levels, and it is not content-based. It also helps with the articulation of courses in a particular curriculum. In Content-based curriculum design, it helps to have the language SLOs clearly stated to articulate how the content of each course helps the language acquisition process. In other words, it helps with the sequencing and offering of content courses.

3.1.2.2. The What

The What is determined by the proficiency level we want to achieve. It can be content-based (e.g. grammar, reading, writing, etc.), or it can be performance level (e.g. critical thinking, discourse strategies, sociolinguistic competence, etc.). This is the point at which Bloom’s Taxonomy (Bloom, 1956) comes in handy.
The *What* is determined by the verb we choose; furthermore, not only is the *What* determine by this verb, but the *How* is link to this verb. Verbs represent the observable and measurable behaviors we want from our learners. So, we have to choose them accordingly. If we choose a verb like “understand”, we will face the challenge of determining how a learner shows understanding (i.e., the observable behavior). But, if we choose a verb such as “pick”; we can easily picture and measure the behavior.

Any verb can be used as long as we have a clear construct of what the behavior is to be measured. For example, the verb “understand” can be used in conjunction with other observable behavioral verbs that show understanding in a phrase like “understand the importance of ... by making a list of advantages and disadvantages of ...” In this case, learners will show understanding by making a list (i.e. an observable and measurable behavior).

3.1.2.3. The *How*

The *How* is oftentimes neglected because of the belief that content trumps process. In the P-E-E-R approach, as can be seen in the description, content does not trump process. On the contrary, the process through which we reach our goals is as important as the content we use. The reason why the *How* is as important as the *What* stems from the necessity to collect data to determine progress in the acquisition process. When data are collected systematically, facilitators are able to make informed decisions with regards to the class, the sequence of events, and the curriculum as a whole. Data-driven decision-making is key to the implementation of this approach. Therefore, a good understanding of measurement and assessment is necessary to complete the cycle of learning.

At this stage, as teachers, we brainstorm as to what tools will help us facilitate learning and how we go about measuring progress. In the past, testing, sometimes disguised as assessment, has been the only tool language teachers use to measure achievement. However, the focus has been solely on achievement and not on the process of acquisition. This is where we, as teachers, have not been able to move from a Behaviorist approach to a Constructivist approach to second language acquisition. We over-rely on testing and tend to forget that assessment is the use of the data collected to help learners achieve goals by modifying our practice to meet their learning/acquisition needs. It is not just assigning a grade and moving on without regard to the learning process.

Emergent technologies play a key role at this stage because, as described in the literature review, by trying new technologies in the classroom, teachers tend to change the way they teach (Aguilar-Sánchez & Donar, 2014), which results in a new approach to collaboration in the classroom, where the teacher or the technology becomes a facilitator. This new role allows teachers to become aware of their learners’ needs by stepping aside and seeing the process of learning take shape in front of them or by being participants in a new learning experience with their students as peers. As an example, we go back to Enríquez (2010) because without looking for key pedagogical factors that influence the use of technology, he discovered that by changing his approach with the aid of technology, his students were able to perform better in traditional tests (i.e. learn). Shouldn’t we all make
that discovery in the XXI Century? We have now closed the loop of learning, and in our case, acquisition and moved on to the Where.

3.1.2.4. The Where

Context is very important for the implementation of the How because as it can provide great opportunities, it can also pose great limitations, especially when we talk about the adoption of technology.

As we think about adopting a tool, and I call it a tool on purpose, to help us facilitate second language acquisition in the classroom; we must ask the following questions:

a. Will the tool allow us to include all learners?

b. Will the tool encourage engagement?

c. Will the tool be learner and learning-centered?

d. Will the tool function well in the classroom? What do we need to do so?

e. Will the tool engage students outside the classroom?

f. Is the tool able to cater to all learning styles?

g. Can data be collected on the use of the tool?

h. Can the tool help us measure learning (i.e. assess)?

i. Do we have enough working understanding of the technology itself? If not, how or where can we get trained?

4. Conclusion

Selecting the technology to deliver activities must follow a sound pedagogical approach. Each activity must be tied to a student-learning outcome and how it is going to benefit language acquisition. The pedagogical approach is, and will remain, at the forefront of any decision-making regarding teaching. In our case, I would like to call it facilitating acquisition. Technologies must be selected because they are the ones, from a teacher perspective, that best enhance the acquisition process and not the delivery of content. They also must be selected because they provide us with data that informs our assessment of the acquisition/assessment process to close the learning loop, which is, unfortunately, oftentimes left open due to poor planning or lack of knowledge on our behalf.

In conclusion, contextualizing and adopting emergent technologies should not be a foreign part of our lesson planning; on the contrary, it should be at the core as long as our goal remains the learner’s success and language acquisition.
Acknowledgements

I would like to thank the Organizing Committee of the second CONLAUNA at Universidad Nacional, and the sponsors of the conference for the invitation and for making it possible for me to participate. I would also like to thank the Department of Global Languages and Cultures of the University of Dayton for their continuous support of my scholarship and Dan McNeely for editing my work.

References


