

Web 2.0 Audio Tools for Online Language Learning: Teaching Method Issues

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Abstract

This article addresses the importance of audio and synchronous communication between instructor and students exhibited in successful online language learning. The authors focus on the Web 2.0 audio technologies emphasizing the variety of available tools that can support online coursework. More specifically, the discussion deals with the instructional value of audio conferencing systems, podcasts, and enhanced podcastings used in online language teaching. An overview of the current research with an in-depth follow up discussion concerning the benefits that students may receive from these Web 2.0 audio tools is highlighted. Furthermore, the authors argue that the integration of freely available Web 2.0 audio tools such as Skype™ or Voice Thread can have a significant impact on improving student's interaction and conversation skills. The authors also describe some of the current best practices for managing and implementing audio conferencing systems, podcasts, and enhanced podcastings in online language courses.

While there has been an increasing trend toward using Web 2.0 applications for language learning in the recent years the following two questions still remain: (1) how do instructors effectively integrate Web 2.0 audio tools in course curriculum?; (2) what are the most appropriate teaching methods to use for enhancing foreign language acquisition? Therefore, the pivotal point of this paper will address language teaching method issues in online courses supported by Web 2.0 audio tools. Finally, the authors provide to online language teachers useful guidelines and strategies for incorporating audio tools in virtual learning environments.

1. Introduction

There is no doubt that an instructor's voice plays a key role in the process of foreign language acquisition. The nature of language learning utilizes an educational process based on a communicational approach in which the instructor and students are typically engaged in a series dynamic conversation. Without having the students hearing and speaking the foreign language little progress can be made. Language instruction has embraced technological advantages since the earliest days of distance education. Over this period of time a variety of learning technologies have emerged and become an integral part of language curriculum. This trend has been especially true for language courses taught at-a-distance. According to Stickler and Hampel [13] there are three determinants of a successful online language teaching. Therefore, online language teachers should be aware of: a new educational content available on the Web and never-ending requirements for being up-to-date; a new ways for increasing interaction with students through utilizing a software developments, and; pedagogical practice for using a new teaching and learning media.

With regard to the integration of Web 2.0 audio technology into language instruction, a body of literature has emerged in the recent years pointing toward the new roles of podcasting, asynchronous audio, and audio-conferencing. However, to date this literature has primarily focused on the technical issues of developing and delivering podcasts while little research has addressed the instructional



value and pedagogical implications of using Web 2.0 audio tools. This paper presents a digest overview of the key points regarding instructional use of Web 2.0 audio tools while emphasizing the importance of vital teaching method issues. Finally, the authors offer suggestions to online language teachers on how to apply pedagogical methods toward audio based instruction.

2. Background: Web based audio technology

The explosion of Web based audio tools that began in the beginning of this decade (circa 2000) has led to the greater uses of audio technology in language instruction. By most accounts the invention of VoIP (Voice over Internet Protocol) technology in 1995 was the break through point in the development of Web based audio services. Early versions of an Internet technology known as Skype™ quickly became one of the most commonly used synchronous conferencing system in language education upon its release in August 2003. Skype™ provides services through VoIP. In the first quarter of 2009 Skype™ had 443 million registered user accounts and a reported 42.2 million active users [15].

In February 12, 2004 addition of The Guardian the word 'podcast' was first coined in a report by Benn Hammersley [8]. He used the term 'podcast' as a label for a new trend in audio technology. Currently, there are three types of podcast: audio only (standard), enhanced podcast (slides with voice over), and vodcast (audio and video). All forms of podcasting use RSS (Really Simple Syndication) as a method for content delivery. RSS allows users to subscribe to a podcast that will automatically deliver new content to all subscribers every time there is a podcast update for that subscription address. Podcasts by themselves do not assume a live or direct feed to the end user as do traditional radio or Internet streamed radio Webcasts.

3. Podcasting

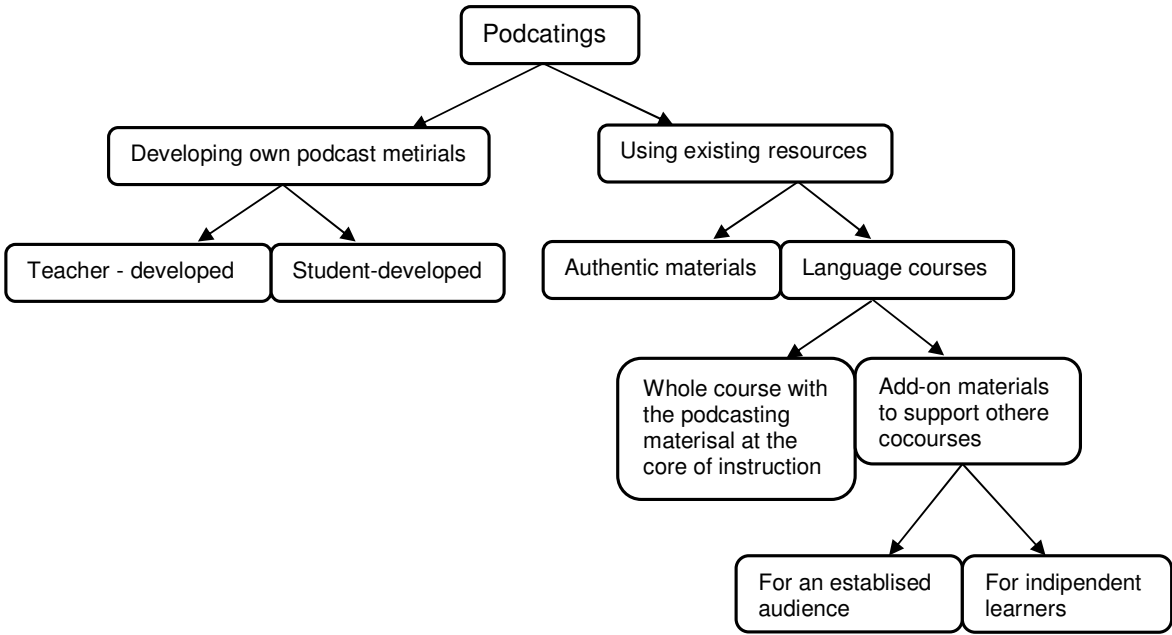
Although, the utilization of podcast in language instruction has just begun, its popularity among teachers and students is considerable. Podcasts offer tremendous instructional potential and are especially applicable in the field of language instruction. As noted in Dale's work [4] the exploration and educational use of podcast to date can be divided into three broad categories as follow: a) crating audio or video archives of class sessions is the most common form of podcasting; b) the second category refers to the use of podcast contents as supplemental course materials (e.g. prerecorded lectures, summaries, etc.); and c) some instructors (who are advanced podcast users) use podcasts for assessment purposes by giving an assignment that requires the students to submit their own podcasts. As Dale points out, using podcast as assessment tool is the most relevant in the courses where oral presentation is a major issue.

Kaplan-Leiserson [10] argues that podcasting has certain implication for learning in general. However, the author emphasizes that podcast content cannot replace reading or listening to live instructor lead presentation, but it can support those methods of teaching. According to Kaplan-Leiserson audio podcasts may contribute to the learning process in several different ways: a) assist auditory learners; b) provide another channel for material review; c) assist non-native speakers; d) provide feedback to learners; e) enable instructors to review training or lectures; f) replace full classroom or online sessions when content simply requires delivery; and g) provide supplementary content or be a part of a blended solution.

A comprehensive study conducted by Rosell-Aguilar [12] addresses the instructional implications and use of podcasts as a delivery method for language learning. Furthermore, this author discusses the value of podcasting particularly in light of CALL (Computer Assisted Language Learning) or SLA (Second Language Acquisition) theories. Based on in-depth analysis of the relevant literature with

respect to the cross-domains of technology and language instruction, Rosell-Aguilar found several advantages of podcasting in language learning: a) portable format including control over playback options; b) attractive in terms of using media player devices (e.g. iPod); c) motivating; d) easy access to audio language content; e) value for the money; e) the possibility to use educational content for both: in-class and out-class activities; etc.

It would be remiss to not notice an interesting taxonomy of uses of podcasting for language learning. This proposed taxonomy helps teachers to gain an insight in to how podcasting has been implemented in language curriculum thus far. Elements of this taxonomy are summarized and presented in the figure below.



Taxonomy of using podcasts for language learning (Rosell-Aguilar, 2007, p.476).

In conclusion, Rosell-Aguilar states that the “most current podcasting practices support didactic learning, but do not, as yet, fully encourage discursive learning” (p.488) [12]. Finally, in order to facilitate interaction in online language courses this author’s study recommends the adoption of synchronous audio (or video) conferencing be utilized.

Enhanced podcast

The instructional value of standard audio podcast has been improved by adding visual elements to audio content (as narrated slides). This intervention resulted in a new form of podcast known as *enhanced podcasting*. VoiceThread is one of the Web based applications used to create enhanced podcasts and has recently gained considerable popularity among the language teachers. Enhanced podcasts have certain advantages over standard podcasting techniques due to their dual (audio and visual) modality in providing educational content to students. Research [3] suggests that activation of both the visual and auditory channels in receiving information significantly decreases student extraneous cognitive load imposed by the design of instructional media. This also implies that since the audio channel is delivered separate from the visual enrichment of the presented content students may experience greater learning efficiency.

However, due to ever and rapidly changing uses of such learning technologies there is currently only a limited body of research regarding educational uses of enhanced podcasts. To date the available



literature hasn't provided clear or sufficient evidence regarding the instructional value of this tool. For instance, Borgia [1] conducted a study on improving vocabulary recall through the use of enhanced podcasts. These study findings suggest a growth in students' pre to post assessment vocabulary skills. Conversely, other research [11] suggests that standard and enhanced podcasts have relatively equal educational value. Although the authors found slightly better outcomes in a group of students who received enhanced lecture podcasts in comparison to a group who used just standard podcasts. This difference was not statistically significant. Finally, the researchers recommend "focusing on the pedagogy behind the podcast as opposed to focusing on the different features of podcasting" (p.96) [11]. Appropriate chunking of information presented via podcast would be one of the possible pedagogical approaches that may improve the effectiveness of the podcasting.

4. Audio conferencing systems

Developments of free audio conferencing systems such as Skype™ have had a profound impact on online language learning. In Godwin-Jones's [7] view Skype™ as well as podcasting can be considered as a *disruptive technology* which "offer intriguing opportunities for language professionals and learners, as they provide additional channels for oral communication" (p.9). There is a body of research that suggests positive implications for using audio conferencing systems for online language learning. For example, synchronous audio conferencing provides an environment for dynamic interaction [6], helps to bridge the gaps between students and instructors who are physically separated in online courses [2], or contributes to flexible speaking practice and supports independent learners [9].

Utilization of synchronous audio conferencing systems in online language course adds a critical missing component: a *live conversation*. Undoubtedly, from the online student's standpoint being able to hear and speak with an instructor or other peers is an experience that will boost their foreign language acquisition and immersion skills. Without hearing and speaking a foreign language little progress can be made. Conversational interaction and exchange among course participants seems to be the best method for developing speech fluency.

Some authors in the field, such as Wang [14] argue that the main downfall of the audio conferencing tools comes for students when they were just being introduced to language teachers where there is a lack of visual contact. Wang also suggests that in successful language learning it is imperative for students to not just be able to speak in the targeted language, but also communicate by using paralinguistic cues (e.g. facial expressions and body movements). "Without visual input, the language learning environment is far removed from real-life situation" according to Wang the ultimate goal for any language teachers is to "communicate and interact in the target language in an authentic environment" (p.378) [14]. Nowadays, the lack of visual contact is not an issue anymore. Technological advancements, increased bandwidth capacity and more elegant software solutions make possible the use of synchronous video conferencing on the large scale in educational institutions.

5. Teaching method issues

A whole array of factors influences educational processes and final leaning outcomes. An interesting list of the issues that have to be taken into consideration before starting an online course is given by Yaden [16]. According to this author the list includes but "it is not limited to the pedagogical beliefs of the teacher, the goals of the teachers and students; the needs; learning styles and abilities of students; the access to technology; and the technological abilities of both students and teachers" (p.1)[16]. It seems that such complexities of teaching components require online instructors to impart special emphasis on their teaching methods.

As discussed by Frey and Overfield [6] teaching supported by audio conferencing system requires from language instructors adjusting to new tools and environments. This adjustment in teaching styles basically refers to the process of embracing different teaching approaches and methods. This implies that instructors have to gain a set of competencies and theoretical knowledge which will support his/her efforts in facilitating and leading an audio discussion. According to the authors a lesson delivered via audio conferencing requires solid up-front planning, good coordination, and creativity. They proposed a comprehensive list of teaching techniques and strategies that may be used by instructors to promote student interaction and eventually increase the effectiveness of an audio based conferencing. Frey and Overfield also argue that if instructors want to "hold the interest of the learner and provide value-added benefits to them, the conference needs to be more than a voice coming over the telephone lines or a talking phone" (p.6)[6]. Finally, study conclusions suggests the following critical elements for making audio conferencing session a success: a) stick to structure; b) limit content; c) participants should indentify them themselves each time they speak; d) identify the source of information; e) offload content as much as possible; f) poll participants (e.g. call person by name first and ask question); g) time limit (3-5 minutes); and h) identify gatekeeper (a person responsible for limiting discussions).

With regard to instructional use of podcasting in domain of language education Ducate and Lomicka [5] recognize output as vital for the process of foreign language acquisition. They suggests a teaching strategy in which using podcasting implies that " students listen to themselves as they edit their output, and then go back, listen again, and revise as necessary" (p.68). By using this approach students can also get feedback from their peers and course instructor.

Overall this section can be concluded with the statement "as with all technology, the most difficult part is finding the most sound pedagogical use for the resource, not creating the resource per se" (p.2)[16].

6. Conclusion

Due to the novelty of World Wide Web based audio tools currently being used in online language learning research the instructional value of "audio conferencing" and podcasting is still in its initial phase. Specifically, there is a limited amount of research focused on "teaching methods and techniques" using audio supported technologies within online language courses. The authors of this paper have made a digest overview and update of the emerging trends concerning integration of audio tools in language curriculum. However, many important issues extend beyond the scope of this paper. Also, the two proposed questions: (1) *how do instructors effectively integrate Web 2.0 audio tools in course curriculum?*; (2) *what are the most appropriate teaching methods to use for enhancing foreign language acquisition?*; have not been fully answered yet. Further research is needed to evaluate the instructors competencies for implementation of audio in language education course curriculum and to identify the most adequat teaching methods for implementing podcasting and audio conferencing.

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