

The Use of Voicethread and Genial.ly as a Source of Interactive Material and Infographics for Pronunciation Practice and Phonemic Dictation

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Introduction

Second and foreign language learning underwent an array of changes stemming from emerging methods, approaches, and techniques in the last century. However, in the past two decades, changes have taken place at a much faster pace and in a much more disruptive manner within the digital age. The notion of Web 2.0, coined by O'Reilly (2005, cited in Alameen, 2001, p. 355), describes it as a “collaborative environment where users have the opportunity to contribute to growing collective knowledge, assist in the development of web-based tools, and participate in online communities”. Besides and beyond its potential for the collaborative advancement of knowledge and the establishment of online networking, one of the most notable features in Web 2.0, and actually its primary contribution, is the hypermedia structure, with its underlying functionalities of interactivity and multimedia. The teaching of pronunciation, which has allegedly and systematically been neglected as the Cinderella of language teaching (Underhill, 2005), has actually been one of the most benefited areas by this growth. The use of Open Educational Resources (Geith & Vignare, 2008), as is the case of Voicethread and interactive infographics generating online software like Genial.ly, can be of great advantage at the time of fostering creative skills and motivating students in the pronunciation classroom.

The project currently underway, which involves a team of student-helpers and teacher-trainees, relies on principles of mashup and fanfic (Knobel & Lankshear, 2011) to collaboratively remix classical tales as a source of pronunciation practice and pronunciation modelling in the context of a core subject in the teacher-training and translation majors in Facultad de Lenguas, Universidad Nacional de Córdoba. The aim of this study is to explore the potential features that two interactive multimedia applications –Genia.ly and Voicethread– may contribute to our lessons in pronunciation training at university level, by allowing teachers and students to create their own interactive multimedia materials with a focus on the design of engaging and motivating tasks to practise phonemic transcription from dictation.

The nature of interactive materials

Interactive multimedia materials are those whose conception and design hinges on a different logic from that underpinning other materials. They actively bring in, relate and integrate image, sound, video, text, and telematic elements into learning resources, thereby maximising connectivity and interactivity (Gisbert Cervera *et al.*, 2016). Thus, when it comes to present-day conceptions of multimedia, there is one main characteristic that these materials have in common: the combination of two or more media, which brings about a given degree of computer-mediated interactivity (Salinas, 1996). The key issue here is the combination and integration of different content forms into one single material.

As J. Salinas points out, the multimedia nature of these materials implies drawing the line in terms of their application and use in learning environments. On the one hand, if we use the potential of multimedia to simply provide information without user active involvement, this constitutes a multimedia presentation. On the other hand, if there is active user participation whereby alternative paths are offered and the different media present the information in relation to the user's reply or choice, this constitutes an interactive material. It is naturally in this latter case of user agency that the full potential of interactivity can be most efficiently and effectively realised.

When it comes to deciding whether to include this kind of materials in a given instructional setting, we should wonder to what extent these materials contribute to the attainment of learning goals. Besides and beyond the specific aims of instructional settings and irrespective of which kind of educational materials we use, Gisbert Cervera *et al.* (2016) state that multimedia interactive materials allow students to:

- Learn to learn,
- Build up learning experiences,
- Establish relationships between the different pieces of knowledge presented,
- Dig deeper into pieces of knowledge,
- Analyse knowledge from different perspectives,
- Promote control over their learning process,
- Learn to analyse and apply existing knowledge,
- Be stimulated and motivated by the materials' presentation and structure,
- Ease the transfer of acquired knowledge.

When and Where to Include Interactive Multimedia Materials

Depending on the aims underpinning the design of the material, this will be apt to be used as an introductory activity to a given unit, for the development of a given topic or to provide for closure. As far as the virtual environment where students may have access to the material, students will typically access it in an asynchronous fashion, especially in the case of a flipped classroom, in a VLE or any other online environment or open website used by the subject, although these materials can also be used in the face-to-face classes as part of a blended learning context.

How Should We Design these Materials?

The choice of a programme or interface for the design of interactive material is a key concern. Many experts advise carefully weighing out available alternatives taking into account the virtual environment where the material will be used and the possibilities offered to target users. Along similar lines, experts recommend taking into consideration the conditions that regulate the use of the software (free, paid service, open, proprietary), whether the final product can be downloaded or whether it will be available online, and so on. The most widely used programmes at university level have historically been PowerPoint, Prezi, CmapTools and Adobe Flash. However, new interfaces have gained in interactive and hypermedia power, and the options we're going to explore in this paper are Genial.ly and Voicethread.

Genial.ly: creating visually-arresting, open interactive content

From a mainly technological viewpoint, Genial.ly is an online tool which allows for the creation and delivery of multimedia content, namely posters, presentations, timelines, thematic maps, guides, reports and infographics. Its outstanding characteristics encompass its user-friendliness, wide-reaching potential and versatility, since this is an easy-to-use web-based tool via which the non-expert user is able to produce stunning interactive visual material. Its widespread use in the field of education, media and marketing makes it a broad and powerful resource that gives rise to unique and remarkably attractive content, without the need of expert programming skills. The user can simply choose from a wide range of available templates, images and icons with countless possibilities in terms of their combinations, choice of colour and

fonts, among other criteria. Genial.ly also allows the user to upload personal content, like the user's own-generated images and audio files, and to integrate various different types of third-party content, like audio files from Soundcloud and Spotify, video files from YouTube, photographs from Flickr, Instagram, Facebook, and, in all, content from over 1,700 providers. The interface also allows users to download the resulting material in html format or to easily share it via the URL, on social media or via WhatsApp. In turn, the material can be later accessed and modified online, so that it is open to being constantly improved and updated.

Genial.ly is a multidisciplinary effort which was designed and developed in Spain by a team of engineers, developers, biologists, journalists and educators (information available online on <https://www.linkedin.com/company/genial-ly>). The registration process is simple and the use of the tool is free of charge. In fact, the user can register with their Google+ or Facebook accounts without further ado. Genial.ly is an excellent tool for the creation of open content as long the user is careful enough not to infringe copyright laws and makes sure they use material that has been released under a CC license and properly acknowledges the author(s). It can also be deployed in the development of material based on remix and mashup principles (Knobel & Lankshear, 2011), thus allowing for the creation of derivative works and content.

Using Genia.ly to Take Phonemic Transcription from Dictation

In a chapter devoted to phonetic transcription, J. C. Wells (2006) draws the line between phonemic and allophonic transcription, arguing that the former entails the notation of phonemes rather than the identification and representation of allophonic variation. In the subject where this project is carried out, namely *Pronunciation Practice*, the students are required to take dictation by using phonemic transcription of what they hear. This is usually done in class, with the teacher reading a full text once for general contextualisation and comprehension, then breaking it up into easily intelligible chunks, and finally repeating these chunks and using pauses so that the students can take phonemic dictation.

ICT has actually opened up a wider range of possibilities, as students can now easily access audio files and deliberately manipulate them in terms of the times they listen to each chunk or utterance, and the pauses and timing

they need in order to be able to successfully take dictation. This has indeed allowed for the personalisation of the exercise, so that it can more effectively suit different learning styles and can cater for the personal time it may take each individual to master the technique of taking down dictation in phonemes.

Interactive multimedia presentations made on Genial.ly have the further advantage of being available online and easily accessible on mobile devices. This allows for further flexibility and the possibility of asynchronous work suited to students' needs. The visual support also contributes to appeal and motivational power of these interactive multimedia presentations. The images in these presentations actually perform two main functions, that of providing semantic support to the other semiotic modes intertwined in the interactive multimedia (Casablanca, 2001), on the one hand, and that of playing an expressive or aesthetic-motivating role (Odetti, 2017) on the other.

Voicethread: collectively designing and managing visual and audio materials

Voicethread is a ground-breaking online app which allows for the creation of multimedia albums, where different types of written files (on PDF, Word, Excel or Power Point formats), images, audio and video files can be uploaded. In turn, people visiting the albums can comment by writing, by recording voice comments via an available microphone, or by videoing themselves through their computer or laptop webcam. The textual function even provides a virtual pencil for users to draw on the slides or on the paused videos. Voicethread has thus great potential as an easy-to-use multimedia collaborative tool. Besides, it is a free cloud application which has few accessibility requirements and is supported by any modern web browser. It also boasts user- and system-friendliness, as it can be easily managed and integrated into popular platforms like Moodle, and it has a downloadable app version for both Android and iOS, which makes it particularly fit for mobile learning.

Voicethread as a Source of Transcription from Dictation

Voicethread constitutes a highly versatile tool when it comes to taking phonemic transcription from dictation. To start with, the possibility of including video files and not merely audio recordings can enhance students' sensitisation since they become able to actually see the tutor's mouth and

the articulators at work when the phonemes are produced. This is naturally a substantial contribution in the case of those students whose learning style is mostly visual.

When it comes to the transcription process, student contributions can be made in different file formats, which allows for further flexibility, and the possibility of inclusion of comments leaves room for collaboration and the exchange of peer suggestions and feedback. Thus, Voicethread is a multifaceted and adaptable online application that can be used to exploit the potential of collaborative learning as a powerful source of student motivation in pronunciation training.

The Potential Value and Pedagogical Implications of Interactivity: Nonlinearity and Openness

As general inherent qualities of both Genial.ly and Voicethread, the hypermedia materials produced by means of these two tools are essentially non-linear and open. Nonlinearity essentially implies that the material can be more flexibly addressed and approached, and its organisation and progression are not linear. As a result, the reader or user can read or manage the material in their own unique fashion. Openness, in turn, offers the opportunity to handle and even modify the material by contributing as a reader-author. This is particularly patent in the case of Voicethread, whereby students can post audio files and written comments, thus contributing not just phonemic transcription, but also examples of dictation that could eventually be used by other students and assessed by the teacher. This can have an obvious positive impact on student autonomy and motivation. In fact, at the dawn of the 21st Century, and while trying to capture the essence of these new materials, recently stemming from Web 2.0, Alfonso Gutiérrez Martín stated:

The most distinctive and fundamental characteristic of these new multimedia files, which pervade present-day notions of digital literacy, is not just their multimedia nature, but rather their hypermedia structure and their interactive potential, which are only possible thanks to digitalization. Their tree- or rhizome-like structure, which allows for alternative routes, presents a different means of approaching information from the traditional one. When compared to the linear nature of verbal and audiovisual

forms of discourse, the new products present information in a web-like structure; while verbally and audiovisually coded files present only one possible route or path, multimedia files are open in terms of information navigation possibilities, and all the possibilities are equally valid (2003, p. 12, our translation).

Remixing, Mashup and Fanfic Principles as a Source of Original Content

In a broad sense, remixing is based on creating novel and innovative products from previously existing cultural objects, and in a more contemporary sense, remix has been recently identified as a social practice that is part of popular culture and relates to digital media (Knobel and Lankshear, 2011). Stemming from pop and electronic music, remixing has now expanded onto other fields, so that thanks to the affordances of digital technologies users can easily remix not just sound but also visual media like paintings, images and snapshots, and that can naturally include teaching and learning materials (*ibid.*, 2011). Mashup, in turn, is a particular form of remix in which data from different sources are combined and customised so that they can perform a novel function and take on a new purpose (Loewen, 2007). Mashup, like remix, has recently entailed the combination or fusion of two or more interfaces or applications and/or sources of open content. Experts in the field of materials design in our local context have actually acknowledged the relevance of remixed or mashupped digital materials in the teaching and learning processes today (Schwartzman & Odetti, 2013; Odetti, 2017), especially at university level (Maggio, 2018).

Fanfic writing is a form of remixing that soared in popularity in the 60's and 70's, when *fanatics* of Star Trek started writing *fiction* (hence the term *fanfic*) based on the original histories and characters and as a kind parallel universe or spin-off of the series. These pieces of fiction started to be shared within the cult community, but later became a quite far-reaching practice, taken on by fanatics worldwide. In the 21st Century, fanfic was finally acknowledged as a proper kind of remix (Knobel & Lankshear, 2011).

Fanfic is especially appealing and meaningful to students; since they can take characters they like and bring them to life in contexts and sequences of events of their own choice and liking. In the particular case of the materials that

are produced for the practice of phonemic transcription from dictation, teachers, student-helpers and students usually pick well-known characters belonging to children's writing tradition, like Cinderella or Pinocchio, and write full or partial brief stories based on these characters as a source of dictation. By choosing these particular characters and writing original storylines, we can rest assured that there will be no copyright infringement of any sort. The participation of student-helpers in this project also adds to the materials' appeal and charm, since the students get more varied and real-life pronunciation models and in some cases even feel prompted to venture out into some dictation themselves.

Final Words

The implementation of online open educational resources brings with it a number of interesting affordances, namely "The activities or practices that the function of a technology enables the user to perform" (Burden & Atkinson, 2008; in Alameen, 2011, p. 358). Genial.ly stands out in terms of its opportunities for stunning and easy-to design interactive multimedia presentations, which are readily accessible online and are easily integrated into several platforms; while Voicethread takes these features up a notch by allowing for collaborative work that gives rise to a heterarchy of voices and authors. In turn, the application of the principles of fanfic and remix in the creation of content ensures that the materials provided do not result in the infringement of copyright and are appealing as well as meaningful and motivating. Thus, these versatile applications seem especially suited to equip teachers, student-helpers and students with tools to produce original interactive multimedia materials which can make the practice of phonemic transcription from dictation more fun and interesting and can enhance student engagement and autonomous learning.

Bibliography

- Alameen, G. (2011). Learner digital stories in Web 2.0 Age. *TESOL Journal*, 2(3), 355-369.
- Casablancas, S. (2001). En cuanto a las imágenes en textos escolares. Función, relevancia y características desde una perspectiva didáctica. En *XII Congreso Nacional y I Iberoamericano de Pedagogía. Hacia el tercer milenio: Cambio educativo y educación para el cambio* (Tomo II,

- pp. 303-304). Madrid: Editorial FARESO. Gisbert Cervera, M., Salinas Ibáñez, J., Chan, M. E., & L. Guardia (2016).
Fundamentos del diseño técnico-pedagógico en e-learning. Conceptualización de materiales multimedia. Barcelona: Universitat Oberta de Catalunya.
- Gutiérrez Martín, A. (2003). *Alfabetización Digital. Algo más que botones y teclas*. Barcelona: Gedisa.
- Knobel, M., & Lankshear, C. (2011). Remix: la nueva escritura popular. *Cuadernos Comillas, 1*, 105-126.
- Loewen, S. (2007). Error correction in the second language classroom. *CLEAR news, 11(12)*, 1-7.
- Maggio, M. (2018). *Reinventar la clase en la universidad*. Buenos Aires: Paidós.
- Mann, S. (2005). The language teacher's development. *Language Teaching, 38*, 103-118.
- Odetti, V. K. (2017). *El diseño de materiales didácticos hipermediales. El caso del PENT Flacso*. Buenos Aires: TeseoPress.
- Schwartzman, G., & Odetti, V. (2013). *Remix, Mashup y Nuevas Narrativas: Materiales Didácticos Hipermediales*. Retrieved from [http://www.pent.org.ar/publicaciones/remix-como-estrategia-paradiseno- materiales-didacticos-hipermediales](http://www.pent.org.ar/publicaciones/remix-como-estrategia-paradiseno-materiales-didacticos-hipermediales)
- Wells, J. C. (2006). Phonetic Transcription and Analysis. In K. Brown (Ed.), *Encyclopedia of Language and Linguistics* (2nd Edition, ps. 386-396). Oxford: Elsevier.