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RESEARCH PAPER

Faculty and student perceptions of the use of web 2.0 tools to develop communication skills in English

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Abstract

As the use of Web 2.0 proves to be beneficial in foreign language learning contexts, this quantitative study focuses on the use of Web 2.0 tools for the development of communication skills in English, specifically in higher education. In order to investigate the participants' perceptions, 341 undergraduate students and 70 faculty members from Portuguese higher education institutions responded to an online survey. They were asked to associate a list of Web 2.0 tool types with the communication skills that they believed could be developed in English language learning.

The general results from both groups show that video sharing tools (for listening and speaking) and presentation tools (for reading and writing) are the ones that the respondents consider to be the most used in class. A deeper analysis allows us to identify other tools that are mostly used in face-to-face and distance learning contexts. We suggest that this list can work as a guideline for faculty members in their practice.

Keywords

English language learning; web 2.0; communication skills; higher education; technology integration.

1. Introduction

Higher education teaching has changed a lot in the past few decades as society demands new skills and profiles for the newest undergraduate students. In Europe, specifically, they are expected to be proficient users of the English language, which will allow them to work abroad and do business, among other activities (Gerhards, 2014).

With the integration of technology in education, particularly in language teaching, new challenges have arisen and new possibilities have emerged, specifically concerning the use of Web 2.0 tools, which can promote the development of communication skills. This occurs not only in a face-to face setting but also in distance learning, as they allow for the practice of these skills in class and also in self-study contexts. Bearing this in mind, we decided to investigate the use of these tools in Portuguese higher education institutions, in order to find out how the faculty mobilises them to promote different skills.

2. The use of technology to promote communication skills

The use of technology can have a positive impact on students' individual study, group-work activities, as well as on the development of active and self-regulated study strategies (Venkatesh, Croteau & Rabah, 2014). In particular, Web 2.0 tools play an important role in this, not only because it allows students to pursue an individual learning path, but also because they can actively create activities for each other (Walker & White, 2013).

With regard to communication skills, the use of Web 2.0 tools proves to be beneficial. A few studies have shown positive outcomes resulting from the integration of technology for the development of the four communication skills of reading, writing, speaking and listening. The work of Cardoso, Cavalheiro and Branco (2018) systematised examples of how Web 2.0 tools can be used for the development of communication skills.

Considering reading skills, the authors stress the possibilities offered by the access to authentic texts in the English language. This allows the students to have contact with different English varieties, work with vocabulary and content-related activities, and create their own reading paths. Other studies show that blogs are considered to be an important tool that contributes to independent learning, autonomous learning and knowledge and information sharing. (Fattah, 2016). Regarding listening skills, online videos, such as YouTube and TED Talk videos are mentioned as examples that are "especially popular among EFL teachers because of their authentic language" (Cardoso et al., 2018, p. 165). Besides this, online podcasts, movie and television show scenes can be important assets. Other studies show that, presently, YouTube seems to be one of the most popular resources for the development of listening skills (Gruba, 2018; Wilkinson, 2016) as we have already mentioned. Skype and Second Life also provide opportunities to listen to native speakers, which contributes to positive gains in this specific skill (Levak & Son, 2017). As far as speaking skills are concerned, Cardoso et al. (2018) stated that (a)synchronous communication applications can be useful as they can be used both inside and outside of the classroom. A few other video-based tools allow for written and/or audio feedback, including that from fellow classmates from other schools or countries. The authors claim that VoiceThread and Flipgrid are seen as useful tools for short presentations, whereas Le (2018) states that voice blog tools are perceived by students as resources that allow them to improve their fluency and pronunciation. The results are not so favourable for syntactic complexity, however. Lastly, writing skills can also be promoted via Web 2.0 tools through joint writing projects that allow the students to create a common text, magazine or book. This involves negotiating both the content and meaning. Concerning this point, a study that analysed the main results of collaborative writing through Facebook showed that in peer interaction activities, learners tend to engage in cognitive and metacognitive processes while working socially. This contributes to the development of their responsibility over their learning (Peeters, 2018). Other studies show that collaborative tasks in Wiki-based environments have proven to bring positive results (Zou, Wang & Xing, 2016), not only in language proficiency through

interaction but also in the development of cognitive, affective and social skills (Kemp et al, 2019).

Considering the fact that sometimes speaking can be seen as the weakest skill in foreign language contexts (Bueno Alastuey, 2011), Web 2.0 tools can provide opportunities for students to replay, rehearse and repeat the oral language, which can contribute to the practice and improvement of speaking abilities. Additionally, they can take advantage of the audio material available online (Walker & White, 2013). The authors also mention the potential of technology for collaborative or interactive reading as well as for publishing the students' texts, which can be very motivating.

Therefore, it is essential to investigate the faculty and students' impressions of the use of Web 2.0 tools for teaching and learning purposes concerning the English language.

3. The study

Bearing in mind the emergence of online education in today's reality, there is a clear need for further investigation into faculty practices as well as students' perceptions of the use of technology in higher education. The purpose of this study was to describe faculty and student perceptions of the use of Web 2.0 tools to develop communication skills in English. The study was developed through an online survey presented to the faculty members and students of English in Portuguese higher education institutions.

Bower (2015) organises web tools into many different categories. In order to shorten the survey, we only selected the ones that were more suitable for the context of English language teaching and learning. Therefore, we included the following categories:

- Audio tools: audio sharing; audio creation and editing;
- Video tools: video sharing; video creation and editing; video streaming;
- Multimodal production tools: presentations;
- Digital storytelling tools: online book creation; comic strip creation; animated videos;
- Website creation tools: individually created websites; wikis; blogs;
- Knowledge organisation and sharing: social bookmarking; republishing;
- Data analysis tools: surveying;
- Timeline tools;
- Social networking systems;
- Text based tools: synchronous text discussion; discussion forums; note taking and document creation;
- Image based tools: image sharing; mind mapping;
- Translation and subtitling.

The last category, 'translation and subtitling', was added to Bower's work considering the growing number of tools that have appeared more recently, which can be used in the context of English learning.

The survey asked the participants about the type of Web 2.0 tool that they perceive as being the most used in class for the development of each communication skill (listening, speaking, reading, writing).

4. Methodology

The participants in this quantitative study were faculty members and students of English from Portuguese higher education institutions. More specifically, regarding the first group, the respondents consisted of 70 faculty members that teach English in Portuguese universities and polytechnic institutes. Most were female (78,6%), held a PhD degree (45,7%) and had taught in a face-to-face context (88,6%) for more than 20 years (28,6%). As far as the students are concerned, most were female (76,5%) and attended classes in a face-to-face context (87,7%).

All of the Portuguese higher education institutions were contacted by email and invited to participate in this study. However, not all of them collaborated. The data was collected over different time periods, starting in the second semester of 2015/2016 and finishing by the end of the first semester of 2017/2018. The survey gathered information on other themes, namely the use of digital tools for assessment and self-study and the main resources, platforms and methods used in the classes. In this work, we focus only on the use of Web 2.0 tools for the development of communication skills.

The analysis of the data was conducted using the Statistical Package for Social Sciences (SPSS, version 23).

5. Findings

Considering the type of Web 2.0 tool that the respondents perceived as the most used in class for the development of each communication skill (listening, speaking, reading, writing), we synthesised the findings of this study by referring to the tools that achieved the highest scores, not only in the general results but also in both groups (faculty and students).

Therefore, in reference to the general faculty results, we found that, for the listening skill, the highest percentage regarding the use of Web 2.0 tools was related to 'video sharing' (67,1%). For reading, it was 'presentations' (54,3%), for speaking it was also 'video sharing' (45,7%) and for writing it was also 'presentations' (57,1%).

When analysing the results regarding the face-to-face and distance learning contexts, new tools emerge, other than the ones mentioned. More specifically, in face-to-face contexts, we have 'surveying' tools for reading (46,8%), as well as 'audio creation and editing' and 'presentations' (both with 45,2%) for speaking. As far as distance learning is concerned, we have 'audio creation and editing' and 'video streaming' (both with 62,5%) for listening; 'blogs' and 'surveying' (both with 62,5%) for reading; and 'video streaming', 'discussion forum' and 'image sharing' (all of them with 50%) for speaking.

Lastly, when we focus on the average percentage values, which are somehow low, we can see that, in general, the results of the faculty members show that they perceive web tools to be mostly used for developing writing skills (25,2%), followed by reading (22,7%), speaking (18,8%) and listening (18,1%). In face-to-face settings, the skill that displays the highest percentage value is writing (25,6%) and the lowest one is for speaking (17,7%). In distance learning settings, the highest value is attributed to reading (30,4%) and the lowest value is the one concerning the use of the tools employed for listening (18,5%). All the results are available in Table 1.

Table 1. Faculty results (in percentages).

	General Results (n=70)				Face-to-face (n=62)				Distance Learning (n=8)			
Web 2.0 tools	L	R	S	W	L	R	S	W	L	R	S	W
Audio creation and editing (Vocaroo, Voxopop…)	40	7,1	44,3	7,1	37,1	8,1	45,2	8,1	62,5	0	37,5	0
Audio sharing (Soundcloud, Audioboom…)	50	4,3	27,1	4,3	50	4,8	25,8	4,8	50	0	37,5	0
Video creation and editing (Screencast-o-matic, Muvee…)	27,1	4,3	25,7	17,1	24,2	3,2	25,8	16,1	50	12,5	25	25
Video sharing (YouTube, Vimeo…)	67,1	11,4	45,7	14,3	67,7	11,3	45,2	14,5	62,5	12,5	50	12,5
Video streaming (Skype, LiveStream…)	45,7	5,7	31,4	4,3	43,5	4,8	29	4,8	62,5	12,5	50	0
Social bookmarking (Delicious, Diggo, Padlet…)	4,3	22,9	4,3	15,7	4,8	22,6	4,8	16,1	0	25	0	12,5
Presentations (Prezi, Google Slides, Slideshare…)	22,9	54,3	44,3	57,1	22,6	53,2	45,2	56,5	25	62,5	37,5	62,5
Online book creation (StoryJumper, Tikatok…)	7,1	18,6	10	27,1	8,1	17,7	9,7	27,4	0	25	12,5	25
Comic strip creation (Pixton, Toondoo…)	2,9	12,9	5,7	27,1	3,2	12,9	3,2	29	0	12,5	25	12,5
Animated videos (Powtoon, Moovly…)	21,4	15,7	18,6	14,3	22,6	14,5	17,7	12,9	12,5	25	25	25
Individually created websites (Google Sites, Wix, Weebly…)	5,7	21,4	11,4	38,6	6,5	22,6	11,3	38,7	0	12,5	12,5	37,5
Wikis (Wikispaces, Wikia…)	5,7	30	11,4	31,4	6,5	29	9,7	30,6	0	37,5	25	37,5
Blogs (Wordpress, Tumblr…)	8,6	40	8,6	37,1	9,7	37,1	8,1	38,7	0	62,5	12,5	25

Republishing (Scoopit, Storify, Pinterest…)	1,4	21,4	4,3	18,6	1,6	19,4	3,2	19,4	0	37,5	12,5	12,5
Surveying (Surveymonkey, Google Forms, Poll Everywhere…)	14,3	48,6	14,3	35,7	14,5	46,8	12,9	37,1	12,5	62,5	25	25
Timeline tools (Timetoast, Timeglider…)	1,4	22,9	5,7	20	1,6	21	3,2	19,4	0	37,5	25	25
Social networking systems (Twitter, Facebook, Edmodo, Google+…)	18,6	31,4	17,1	41,4	17,7	30,6	16,1	40,3	25	37,5	25	50
Synchronous collaboration tools (Google Hangouts, WizIQ…)	17,1	15,7	17,1	22,9	16,1	12,9	16,1	22,6	25	37,5	25	25
Discussion forums (Proboards, Readup…)	11,4	24,3	20	24,3	9,7	21	16,1	24,2	25	50	50	25
Note-taking and document creation (Google Docs, Evernote…)	5,7	40	8,6	44,3	6,5	38,7	8,1	46,8	0	50	12,5	25
Image sharing (Flickr, Instagram, Wikimedia Commons…)	11,4	25,7	25,7	15,7	11,3	24,2	22,6	14,5	12,5	37,5	50	25
Mindmapping (Mindmeister, Popplet…)	10	20	15,7	27,1	11,3	19,4	14,5	29	0	25	25	12,5
Translation and subtitling (Dotsub…)	17,1	24,3	14,3	34,3	19,4	24,2	12,9	37,1	0	25	25	12,5
Average percentage value:	18,1	22,7	18,8	25,2	18,1	21,7	17,7	25,6	18,5	30,4	27,2	22,3

The students' results regarding the most frequently used tools are very similar to the ones obtained from the faculty members. The only new tools that emerge from the results with a higher percentage are 'social networking systems' for writing (with 45,2%) and 'note-taking and document creation' for reading (with 50%).

However, the average percentage values are totally different from the ones that we see in the faculty results, although they are also largely low. The general results show that the students perceive web tools to be mostly used for promoting reading skills (28,5%), followed by writing (22,8%), listening (20,7%) and speaking (17,6%) skills. When analysing the results in view of the distinction between face-to-face and distance learning settings, we can see that they parallel the general results, as both average percentage values refer to reading skills, while the lowest ones pertain to speaking skills. All these results are shown in Table 2.

Table 2. Student results (in percentages).

	General Results (n=341)				Face-to-face (n=299)				Distance Learning (n=42)			
Web 2.0 tools	L	R	S	W	L	R	S	W	L	R	S	W
Audio creation and editing (Vocaroo, Voxopop…)	53,7	9,1	32,3	9,7	52,2	8	28,4	8,7	64,3	16,7	59,5	16,7
Audio sharing (Soundcloud, Audioboom…)	49,9	5,0	24,6	4,4	47,8	5	23,1	3,7	64,3	4,8	35,7	9,5
Video creation and editing (Screencast-o-matic, Muvee…)	25,5	17,6	22,9	10,6	24,1	17,1	21,4	10,7	35,7	21,4	31	9,5
Video sharing (YouTube, Vimeo…)	65,4	15,5	36,4	10,3	64,9	15,1	36,5	9,7	69	19	35,7	14,3
Video streaming (Skype, LiveStream…)	40,8	9,7	33,4	5,3	38,5	8,7	30,1	4,3	57,1	16,7	57,1	11,9
Social bookmarking (Delicious, Diggo, Padlet…)	15,5	26,1	12,6	19,1	15,7	25,4	11,7	19,1	14,3	31	19	19
Presentations (Prezi, Google Slides, Slideshare…)	23,2	56,0	31,4	42,8	24,1	56,9	32,8	43,1	16,7	50	21,4	40,5
Online book creation (StoryJumper, Tikatok…)	7,3	36,4	7,3	29,6	7,7	35,1	6,7	29,8	4,8	45,2	11,9	28,6
Comic strip creation (Pixton, Toondoo…)	5,9	31,7	8,2	27,6	5,4	30,8	7,4	27,4	9,5	38,1	14,3	28,6
Animated videos (Powtoon, Moovly…)	32,3	17,6	23,8	13,5	31,4	16,7	22,7	13,4	38,1	23,8	31	14,3
Individually created websites (Google Sites, Wix, Weebly…)	11,7	33,1	12,6	29,9	11	32,4	11,4	30,1	16,7	38,1	21,4	28,6
Wikis (Wikispaces, Wikia…)	8,2	36,1	9,1	24,6	6,7	35,5	8	24,7	19	40,5	16,7	23,8
Blogs (Wordpress, Tumblr…)	9,1	36,7	8,8	29,3	9	36,5	8,4	30,1	9,5	38,1	11,9	23,8
Republishing (Scoopit, Storify, Pinterest…)	10,6	27,6	6,7	18,8	10,7	27,1	7,4	18,1	9,5	31	2,4	23,8
Surveying (Surveymonkey, Google Forms, Poll Everywhere…)	7,6	32,0	9,1	29,3	7,7	32,1	8,7	28,8	7,1	31	11,9	33,3
Timeline tools (Timetoast, Timeglider…)	5,9	28,2	6,5	20,2	5,4	28,4	6	20,1	9,5	26,2	9,5	21,4
Social networking systems (Twitter, Facebook, Edmodo, Google+…)	24,3	39,6	23,5	35,8	23,7	39,5	22,4	34,4	28,6	40,5	31	45,2
Synchronous collaboration tools (Google Hangouts, WizIQ…)	17,6	32,6	20,2	27,0	17,1	33,4	19,4	27,4	21,4	26,2	26,2	23,8
Discussion forums (Proboards, Readup…)	12,6	31,1	17,3	27,9	11,4	29,8	15,7	26,1	21,4	40,5	28,6	40,5
Note-taking and document creation (Google Docs, Evernote…)	7,3	38,4	10,6	36,1	7	36,8	10	35,1	9,5	50	14,3	42,9

Image sharing (Flickr, Instagram, Wikimedia Commons…)	9,4	30,8	14,4	19,9	9,4	30,1	13,4	20,1	9,5	35,7	21,4	19
Mindmapping (Mindmeister, Popplet…)	7,3	26,7	9,1	19,4	7	26,8	9	20,1	9,5	26,2	9,5	14,3
Translation and subtitling (Dotsub…)	25,8	38,4	24,3	32,8	25,8	38,1	24,7	34,1	26,2	40,5	21,4	23,8
Average percentage value:	20,7	28,5	17,6	22,8	20,2	28,1	16,8	22,6	24,8	31,8	23,6	24,2

Using the information retrieved from the tables, we were able to create a graphic scheme that synthesised the results (Figure 1). Therefore, as far as reception skills are concerned, we found that the most commonly used web 2.0 tools for listening are 'video sharing', 'audio creation and editing' and 'video streaming'. The tools that are mostly used for supporting the development of reading skills are 'presentations', 'surveying', 'blogs' and 'note-taking and document creation'. Regarding production skills, the most commonly used tools for speaking are 'video sharing', 'audio creation and editing', 'presentations', 'video streaming', 'discussion forums' and 'image sharing', whereas only two web tools stand out for supporting writing skills, specifically 'presentations' and 'social networking systems'.

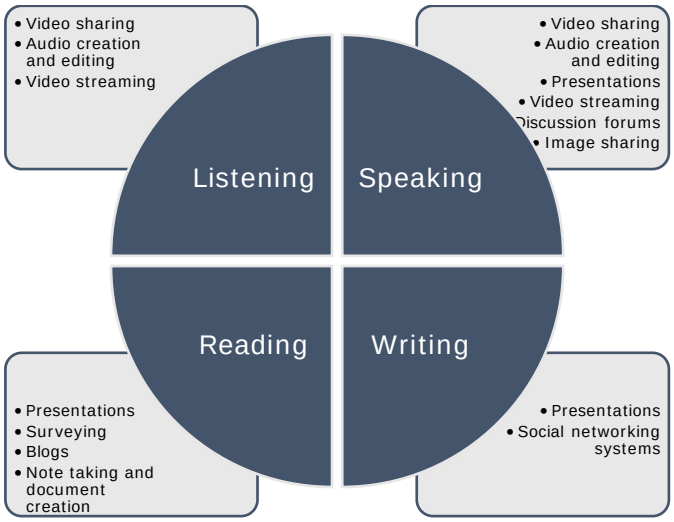

Figure 1. Most used web 2.0 tools for the development of English skills in higher education.

6. Discussion

The findings show that there are two very commonly used tools in the development of English communication skills in higher education, namely 'video sharing' and 'presentations'. With a deeper analysis, we found other tools that are used for this purpose, despite the fact that the usage percentages are not very high and sometimes even lower than 50%.

Globally, we can see that the type of web tools used for supporting the development of students' listening/speaking skills is the same as the one that is used for promoting reading/writing skills, no matter whether they refer to content assimilation or production. Therefore, there seems to be an indistinct use of Web 2.0 tools or at least a limited amount of research into specific Web 2.0 tools that can be specifically used for promoting different skills in a more effective way.

When examining both face-to-face and distance learning contexts, we conclude that technology is frequently used for reading/writing rather than for listening/speaking, with the latter skills displaying very low percentage values. We find these differences to be detrimental for the learning process and we believe that a more balanced use of technology to promote these skills would be advantageous.

Although we are confronted with a lack of studies focusing on the perspective of the use of technology for developing different language skills, research shows that "students seem to feel more self-confident when dealing with writing and reading skills than with those which involve some type of oral interaction" (González-Vera 2016, p. 56). González Otero (2016, p. 85) reinforces this idea by stating: "[…] we also realised that the development of students' communicative skills was generally disregarded in the language classroom, especially in what respects listening comprehension, oral production and pronunciation and fluency". As our results revealed very different web tools that can be used for this purpose, specifically regarding speaking skills, we believe this gap could be filled by the use of technology and that this is an important contribution of our work. Using diversified and more fit-to-purpose Web 2.0 tools (tools that are user-friendly, interoperable, that promote social collaboration, user-participation and content-creation) can help both faculty and students to be more efficient in the development of English language skills.

7. Conclusion

This study shows that faculty and students' perceptions regarding the use of Web 2.0 tools to develop English communication skills are generally low. We believe that an investment in the adoption of new teaching and learning approaches where technology use is contemplated for this specific purpose could have worthwhile results, as "digital resources have been recognised as an important source of linguistic and cultural knowledge for English as a foreign language (EFL) learners to explore" (Shen, Yuan & Ewing, 2015). At the same time, they contribute to the promotion of students' digital literacy, which is another relevant set of skills in today's social and professional worlds.

Hubbard (2013) stated that "it is not just the technology that matters, nor is it just how teachers use that technology that matters. What really matters is how learners use it. […]" (p. 175). Therefore, the role of faculty is of the utmost importance, as they have a guiding role in this process by promoting the use of technology as a complement to (face-to-face or virtual) classroom learning activities and, consequently, encouraging the students' autonomy and self-regulation (Nobre & Relvas, 2015; Trinder, 2017). For that reason, these results can therefore work as a guideline for faculty members to integrate technology in their teaching practice. This will hopefully contribute to an improvement in their students' learning activities.

Ultimately, we believe that a diverse choice of methods and tools associated with a solid pedagogical approach allows technology to promote communication skills in English language learning, specifically speaking skills. These are sometimes set aside but they are essential in the labour market nowadays.

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References

Bower, M. (2015). A typology of Web 2.0 learning technologies. *Educause* (47), 763–777. https://doi.org/10.1111/bjet.12344

Bueno Alastuey, M. C. (2011). Perceived benefits and drawbacks of synchronous voice-based computer-mediated communication in the foreign language classroom. *Computer Assisted Language Learning*, *24*(5), 419-432. https://doi:10.1080/09588221.2011.574639

Cardoso, S., Cavalheiro, L. & Branco, J. (2018). The use of technology for English language learning and teaching: some examples. In L. Cavalheiro (Org.), *Preparing English Language Teachers for Today's Globalized World* (pp. 159-176). Ribeirão – V. N. Famalicão: Edições Húmus.

Fattah, S. F. E. S. A. (2016). The Effectiveness of Using Blogs as an Independent Learning Tool to Develop Reading Skills for University Students. *Journal of Education and Practice*, *7*(32), 65-73.

Gerhards, J. (2014). Transnational linguistic capital: Explaining English proficiency in 27 European countries. *International Sociology, 29*(1), 56-74. https://doi.org/10.1177/0268580913519461

González Otero, R. (2016). Innovative resources based on ICTs and authentic materials to improve EFL students' communicative needs. In A. Pareja-Lora, C. Calle-Martínez, & P. Rodríguez-Arancón (Eds), *New perspectives on teaching and working with languages in the digital era*. Dublin: Research-publishing.net, 83-92. https://doi.org/10.14705/rpnet.2016.tislid2014.424

Gonzalez-Vera, P. (2016). The e-generation: the use of technology for foreign language learning. In A. Pareja-Lora, C. Calle-Martínez, & P. Rodríguez-Arancón (Eds), *New perspectives on teaching and working with languages in the digital era*. Dublin: Research-Publishing.net, 51-61. https://doi.org/10.14705/rpnet.2016.tislid2014.421

Gruba, P. (2018). Technology for Teaching Listening. In J. I. Liontas. *The TESOL Encyclopedia of English Language Teaching* (pp. 1-5). Wiley Online Library. https://doi.org/10.1002/9781118784235.eelt0442

Hubbard, P. (2013). Making a case for learner training in technology enhanced language learning environments. *Calico Journal, 30*(2), 163-178. https://doi.org/10.11139/cj.30.2.163-178

Kemp, C., Li, P., Li, Y., Ma, D., Ren, S., Tian, A., Wang, D., Xie, L., You, J., Zhang, J., Zhu, L. & Zhuang, H. (2019). Collaborative Wiki Writing Gives Language Learners Opportunities for Personalised Participatory Peer-Feedback. Shaping Future Schools with Digital Technology, 147–163. https://doi.org/10.1007/978-981-13-9439-3_9

Le, T. (2018). Voice Recording in second language outside the classroom: Process and product. *Journal of NELTA*, *23*(1-2), 129-141. https://doi.org/10.3126/nelta.v23i1-2.23357

Levak, N., & Son, J. B. (2017). Facilitating second language learners' listening comprehension with Second Life and Skype. *ReCALL*, *29*(2), 200-218. https://doi.org/10.1017/S0958344016000215

Nobre, A., & Relvas, M. D. J. (2015). Avaliação alternativa digital da oralidade "Em Qualquer Lugar do Mundo". In T. Cardoso, A. Pereira & L. Nunes. Avaliação e tecnologias no ensino superior (pp. 38-51). Lisboa: Universidade Aberta.

Peeters, W. (2018). Applying the networking power of Web 2.0 to the foreign language classroom: A taxonomy of the online peer interaction process. *Computer Assisted Language Learning, 31*(8), 905-931. https://doi.org/10.1080/09588221.2018.1465982

Shen, H., Yuan, Y., & Ewing, R. (2015). English learning websites and digital resources from the perspective of Chinese university EFL practitioners. *ReCALL*, *27*(2), 156-176. https://doi.org/10.1017/s0958344014000263

Trinder, R. (2017). Informal and deliberate learning with new technologies. *ELT Journal*, *71*(4), 401-412. https://doi.org/10.1093/elt/ccw117

Venkatesh, V., Croteau, A. M., & Rabah, J. (2014). Perceptions of effectiveness of instructional uses of technology in higher education in an era of Web 2.0. In *2014 47th Hawaii international conference on system sciences*, 110-119. Washington: IEEE Computer Society. https://doi.org/10.1109/hicss.2014.22

Walker, A., & White, G. (2013). *Technology Enhanced Language Learning: connecting theory and practice-Oxford Handbooks for Language Teachers*. Oxford: Oxford University Press.

Wilkinson, M. (2016). Language learning with ICT. In W.A. Renandya & H.P. Widodo (Eds.), *English Language Teaching Today, English Language Education,* Vol. 5 (pp. 257-276). Switzerland: Springer International Publishing. doi:10.1007/978-3-319-38834-2_18

Zou, B., Wang, D., & Xing, M. (2016). Collaborative tasks in Wiki-based environment in EFL learning. *Computer Assisted Language Learning*, *29*(5), 1001-1018. https://doi.org/10.1080/09588221.2015.1121878