EUROCALL

UNIVERSITY OF COPENHAGEN

Crowdsourcing in language learning as a continuation of CALL in varied technological, social, and ethical contexts

Elżbieta Gajek[1]

Abstract. Crowdsourcing not only opens new perspectives within the general concept of Computer Assisted Language Learning (CALL), but also raises questions about ethics, motivation, and fair contribution. Technology offers platforms such as Duolingo, Bussu, and Babbel for learning languages with active contribution of the learners. Such applications reach millions of users. Thus, there is a need for initiatives to explore the potential of crowdsourcing for language learning. One of them is enetCollect CA16105 Combining Language Learning with Crowdsourcing Techniques, which is a European project within COST action. The aim of this paper is to disseminate the project's ideas as well as present some results of the research done by the author as her contribution to the project activities. The findings show that language learners are not heavy gamers and the feedback they receive is the strongest motivational factor towards crowdourcing.

Keywords: crowdsourcing, language learning, gamification, motivation.

1. Introduction

Crowdsourcing in education extends opportunities for formal and informal learning through free or commercial digital tools. Their social impact is huge as they reach millions of learners. Such applications gather learner data with or without the user's awareness or permission. Thus, ethical considerations of learning with apps as well as the building of awareness among teachers and learners of the role of artificial intelligence devices in language learning need to be reviewed. To enhance a better understanding of motivational, technological,

1. University of Warsaw, Warsaw, Poland; e.gajek@uw.edu.pl; https://orcid.org/0000-0003-2971-8334

How to cite: Gajek, E. (2020). Crowdsourcing in language learning as a continuation of CALL in varied technological, social, and ethical contexts. In K.-M. Frederiksen, S. Larsen, L. Bradley & S. Thouësny (Eds), *CALL for widening participation: short papers from EUROCALL 2020* (pp. 75-80). Research-publishing.net. https://doi.org/10.14705/rpnet.2020.48.1168

and ethical issues, a large group of over 150 researchers and practitioners from 35 countries have joined forces in enetCollect: Combining Language Learning with Crowdsourcing Techniques, a European project within COST action. The project aims at researching and promoting crowdsourcing techniques for educational purposes in open, collaborative environments. enetCollect works towards finding optimal opportunities for the use of crowdsourcing and gamification techniques in language learning, teaching, and for the production of materials. As mentioned on the Web2Learn platform[2], "the project focuses on enhancing the production of learning material in order to cope with the increasing demand for language learning and the striking diversification of learner profiles [resulting from] intensified migration flows motivated by educational, professional/economic, or geopolitical circumstances" (n.p., see also Agerri, Maritxalar, Lyding, & Nicolas, 2018; Lyding, Nicolas, Bédi, & Fort, 2018).

Crowdsourcing is a technology mediated form of collecting, creating, and distributing data (Howe, 2006). It is associated with digital technology advancements and mobile applications (Godwin-Jones, 2011). In this sense it can be perceived as a learning path rooted in CALL. Yet, both teachers and the academic administration display a lack of ethical competence when novel educational trends are introduced (Catacutan & De Guzman, 2015). Thus, the investigation of student teachers' and learners' attitudes towards crowdsourcing as a teaching and learning technique fills a contextual gap in terms of its application in education.

This paper presents the objectives of enetCollect, as well as selected results obtained in the first period of the project. It focuses on selected results of the Polish pilot of a survey carried out among Polish second language learners; who were asked about how they use technology for learning languages and what their opinion was on the collection of their data by providers of content for learning. The results collected among students of linguistics and secondary school learners are compared. The two pilots are steps towards the preparation of a European survey addressed to learners of languages via digital crowdsourcing techniques.

2. Method

In enetCollect, two conceptual approaches to crowdsourcing are implemented. Explicit crowdsourcing during which the participants know what they do (e.g.

2. http://web2learn.eu/project/enetcollect-combining-language-learning-with-crowdsourcing-techniques/?

adding translation, giving feedback) and implicit crowdsourcing, during which they do not know that they are participating in a crowdsourcing activity (e.g. re-CAPTCHA).

EnetCollect consists of five working groups which are focused on *explicit* and implicit crowdsourcing material production; user-oriented design strategies, technology specifications, and ethical, legal aspects of crowdsourcing. The first survey on teachers was disseminated in 2018/2019 and was completed by a total of 1,127 respondents from 37 countries. The findings demonstrated that teachers perceive crowdsourcing as a form of CALL. They prefer explicit crowdsourcing. They are interested in using crowdsourcing in their practice and are willing to try it but they need more information about crowdsourcing, more practical guidelines, tutorials, and examples (Arhar Holdt et al., 2020). The current study examined student teachers' and teenagers' interest in crowdsourcing approaches to language education.Three surveys were disseminated. The first included 98 student participants (all future language teachers who were students aged 21-23, (F: 81.60%, M: 18.4%). The second and third surveys contained the same questions, but were disseminated to two separate groups respectively: 58 University Students (US) (aged 18-25, (F: 79.3%, M: 20.4%)), and 75 Secondary School Learners (SSL) (aged, 16-18, (F: 73.3%, M: 14.7%)), with 12% choosing not to respond.

3. Results and discussion

The results of the first survey show that 26% of respondents were familiar with the term crowdsourcing before taking the survey, and 22% knew how to make links with crowdsourcing and language learning. A total of 74% of respondents had used Wikipedia for language learning, while 90% surprisingly thought that a crowd can prepare high quality content and only 3% thought that crowdsourcing is a form of cheating, as people are not paid for their work. Furthermore, 81% wanted to learn about crowdsourcing in language learning and 76% wanted to implement innovative pedagogical concepts in their teaching. The second and third surveys revealed the following results (see Table 1).

The respondents were also asked about the motivational role of feedback and their reactions to being watched or recorded, as well as their tolerance to errors noticed in the learning materials. SSL indicated a variety of linguistic feedback as the strongest motivational factor, as well as their level of knowledge (Figure 1), with the latter also being identified by US (Figure 2).

Table 1. Respondents' habits (author's own work)

Websites used	**SSL**	**US**
Kahoot	78.7%	58.6%
Wikipedia	66.7%	89.7%
Duolingo	52%	81%
KhanAcademy	36%	15%
Place		
outside the class	80%	94.8%
in class	49.3%	48.3%
Frequency of playing games		
nil	42.7%	33.8%
once a month	9.3%	27.6%
3-5 times per week	34.7%	31%
Reasons for playing games		
for having fun	66.7%	84.5%
as part of the class activity	10.7%	51.7%
for doing what others do	12%	25.9%
Devices used		
smartphone	97.3%	98.3%
laptop	70.7%	94.8%
Not adding any content to websites/apps	74.7%	60.3%

Figure 1. The motivational role of feedback – SSL's answers (author's own work)

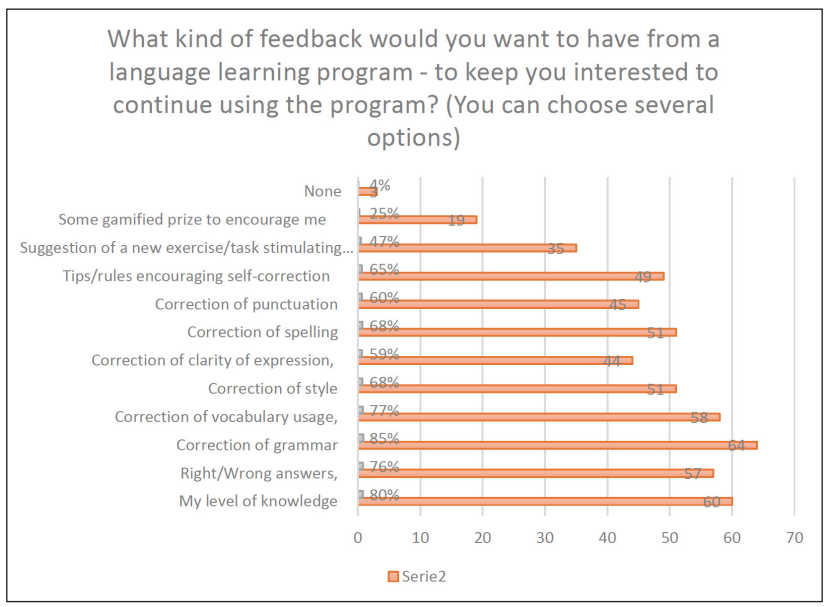
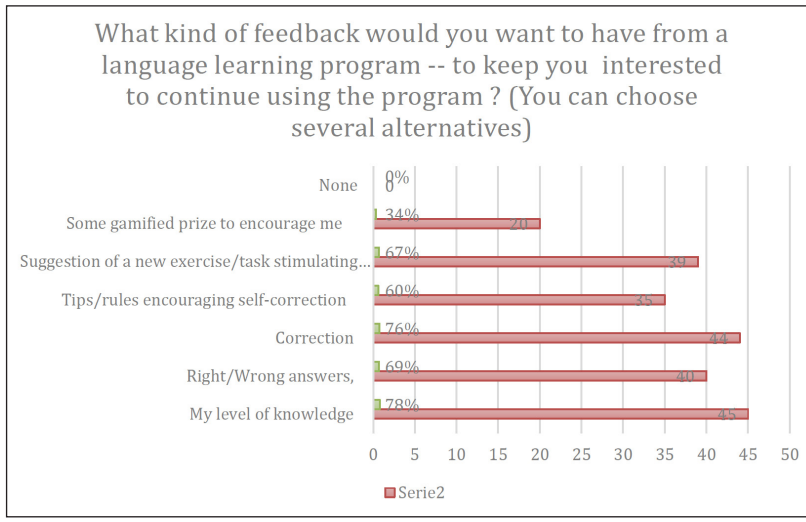


Figure 2. Motivational role of feedback US's answers (author's own work)



- **Reaction to being watched.** The US and SSL differed in their tolerance for being watched by the app/website without permission: 62.7% (US) vs. **32.8%** (SSL) did not want to continue using such an app/website, while 17.3% (US) vs. **31%** (SSL) would accept being watched, and 20% (US) vs. **36.2%** (SSL) were uncertain about such a situation.

- **Reaction to recording interactions with an app/website.** Similarly, SSL were less tolerant of their interaction being recorded and analysed with the app (72% (US); **53.4%** (SSL)). They never thought about this (14.7% (US); **17.2%** (SSL)). It did not matter to them (9.3% (US); (**24.1%** (SSL)).

- **Reaction to errors.** Half of both groups could forgive errors: (50.7% (US) vs. **50%** (SSL)). But 44% of the US vs. **8%** of the SSL did not forgive such errors, depending on their teachers **16%** vs. only 1.7% of the US.

4. Conclusions

US and SSL present similar attitudes and opinions, but teenagers are less tolerant of being watched and recorded by the app/website without permission. SSL are more teacher dependent in the case of errors noticed in the app/website. Both groups will accept a variety of linguistic feedback given by the app/website. This feedback,

and an indication of their language level, proved to be the strongest motivational factors for the learners to continue using the language learning app/website. They are not heavy gamers: One third did not play and one third played very often.

The main difference between early CALL and recent results is that we no longer talk about the computer literacy of users or access to devices since all use smartphones and laptops. The focal points are the embracing of interactions with apps/websites, and contextual factors such as ethical issues including the protection of user data, quality of the crowdsourced materials, and users' motivations to continue learning with the app/website.

5. Acknowledgements

I would like to thank the members of enetCollect: Ciler Hatipoglu, Nihada Delibegovic, and Lina Milosevska for their collaboration on the last two surveys and the enetCollect project for their inspiration.

References

Agerri, R., Maritxalar, M., Lyding, V., & Nicolas, L. (2018). enetCollect: a new European network for combining language learning with crowdsourcing techniques. *Sociedad Espaniola para el Procesamiento del Lenguaje Natural, 61*, 171-174.

Arhar Holdt, Š., Zviel-Girshin, R., Gajek, E., Durán-Muñoz, I., Bago, P., Fort, K., Hatipoğlu, Ç., Kasperavičienė, R., Koeva, S., Lazić Konjik, I., Miloshevska, L., Ordulj, A., Rodosthenous, C., Volodina, E., Weber, T., & Zanasi, L. (2020). Language teachers and crowdsourcing: insights from a cross-European survey. *Rasprave 46*(1), 1-28. https://doi.org/10.31724/rihjj.46.1.1

Catacutan, M. G., & De Guzman, A. (2015). Ethical decision-making in academic administration: a qualitative study of college deans' ethical frameworks. *Australian Educational Researcher, 42*(4), 483-514. https://doi.org/10.1007/s13384-015-0179-y

Godwin-Jones, R. (2011). Emerging technologies: mobile apps for language learning. *Language Learning & Technology, 15*(2), 2-11.

Howe, J. (2006). The rise of crowdsourcing. *Wired Magazine, 14*(6), 1-4.

Lyding, V., Nicolas, L., Bédi, B., & Fort, K. (2018). Introducing the European network for combining language learning and crowdsourcing techniques (enetCollect). In P. Taalas, J. Jalkanen, L. Bradley & S. Thouësny (Eds), *Future-proof CALL: language learning as exploration and encounters – short papers from EUROCALL 2018* (pp. 176-181). Research-publishing.net. https://doi.org/10.14705/rpnet.2018.26.833

Published by Research-publishing.net, a not-for-profit association
Contact: info@research-publishing.net

CALL for widening participation: short papers from EUROCALL 2020
Edited by Karen-Margrete Frederiksen, Sanne Larsen, Linda Bradley, and Sylvie Thouësny

Publication date: 2020/12/14

Typeset by Research-publishing.net
Cover theme by © 2020 Marie Flensborg (frw831@hum.ku.dk), based on illustration from freepik.com
Cover layout by © 2020 Raphaël Savina (raphael@savina.net)

ISBN13: 978-2-490057-81-8 (Ebook, PDF, colour)

British Library Cataloguing-in-Publication Data.
A cataloguing record for this book is available from the British Library.

Legal deposit, France: Bibliothèque Nationale de France - Dépôt légal: décembre 2020.