Online language teacher education and active learning through CALL and ICALL

Giovanna Carloni[1]

Abstract. This essay illustrates how an online language education course, implemented within an online language teacher education programme offered at master's level at an Italian university, was designed to foster pre-service teachers' active learning through digitally-enhanced activities. The course was developed within a community of inquiry framework and from a socio-constructivist perspective. The online course adopted a flipped learning approach. Pre-service teachers carried out asynchronous digitally-enhanced activities individually and collaboratively before class and synchronous technology-enhanced collaborative activities during live classes. Pre-service teachers thus engaged in active learning throughout the course.

Keywords: online learning, language teacher education, active learning, educational technology.

1. Introduction

The Covid-19 disruption has fostered the digitisation of education extensively. In this new context, teacher education programmes have had to re-imagine their learning spaces and practices to cater to teachers' pedagogical needs in online learning environments (Assunção & Swennen, 2020). Online course design has thus become pivotal in higher education worldwide. In this respect, the present essay aims to illustrate how an online language education course was designed to foster pre-service language teachers' active learning through synchronous and asynchronous digitally-enhanced activities. The course was implemented within an online language teacher education programme, offered at master's level at an Italian university, targeted at pre-service teachers specialising in teaching Italian as a second language.

1. University of Urbino, Urbino, Italy; giovanna.carloni@uniurb.it; https://orcid.org/0000-0002-4204-2861

2.　　　Online language education course design

In the online language education course, pre-service teachers learned how to plan and create digitally-enhanced language teaching units. The online language education course was designed within a community of inquiry framework (Garrison, Anderson, & Archer, 2000, 2001; Vaughan, Cleveland-Innes, & Garrison, 2013) and from a socio-constructivist perspective, enhancing knowledge co-development (Lantolf, Poehner, & Thorne, 2020; Lantolf & Thorne, 2006; Vygotsky, 1978). In keeping with the community of inquiry model, the course instructor created practices and activities targeted at fostering social, teaching, and cognitive presence (Garrison et al., 2000, 2001; Vaughan et al., 2013). The course was developed using backward design; the instructor thus devised the course learning outcomes first, the assessment criteria second, and the strategies and activities targeted at achieving the course objectives afterwards (McTighe & Wiggins, 2012).

The online language education course was designed to foster pre-service teachers' active learning with the support of digital and educational technologies. In active learning, students engage in knowledge construction using higher-order thinking skills (Bonwell & Eison, 1991; Børte, Nesje, & Lillejord, 2020; Lee, Morrone, & Siering, 2018; Prince, 2004; Stefanou et al., 2013). In this light, the instructor adopted a flipped learning approach to design digitally-enhanced pedagogical practices promoting critical thinking (Bergmann & Sams, 2012, 2014; Marshall & Kostka, 2020; Marshall & Rodriguez-Buitrago, 2017). Pre-class activities required pre-service language teachers to engage with subject-specific content and peers to various degrees. For example, before Zoom-based[2] classes, pre-service teachers watched videos, previously recorded by the instructor, and carried out activities, focusing on the video content, using various digital technologies, such as avatar maker tools, mind mapping, peer assessment tools, AI-driven technologies, and digital social educational platforms suitable for collaborative annotation of texts and videos. In this respect, a digital social educational platform used, Perusall[3], provided the instructor with reports, based on data analytics, highlighting the most challenging topics for students; the instructor could also access reports on individual students' degree of engagement with the assigned materials. These data enabled the instructor to design synchronous activities catering to pre-service teachers' needs. During synchronous classes, activities were highly chunked in line with digital pedagogy (Bates, 2019). In live classes, pre-service teachers engaged with tasks fostering higher-level thinking skills and a deeper conceptual understanding of the

2. https://zoom.us
3. www.perusall.com

subject-specific content studied during pre-class asynchronous activities (Brinks Lockwood, 2014, 2018). Synchronous classes started with ice breakers, pivotal to promoting social presence in online spaces; the instructor implemented ice breakers with the support of digital noticeboards or digital pedagogical platforms suited to promoting remote collaboration. During Zoom-based classes, pre-service teachers engaged in collaborative learning through peer instruction (Mazur, 1997), SOFLA (Synchronous Online Flipped Learning Approach – Marshall & Kostka, 2020), and liberating structures activities (Lipmanowicz & McCandless, 2014). In synchronous classes, pre-service teachers thus engaged in active learning through collaborative activities implemented with the support of collaborative annotation spaces, digital noticeboards, and digital educational platforms suitable for remote collaboration. Digital and educational technologies, along with digital educational platforms, were instrumental in developing cognitive and teaching presence in the course.

Pre-service teachers developed a digitally-enhanced language teaching unit collaboratively during the course. Each week, as home assignments, pre-service teachers devised a section of the digitally-enhanced teaching unit in small groups. Before synchronous classes, the instructor assessed the artefacts created collaboratively and provided each group with video recorded feedback, also suited to fostering social presence. Pre-service teachers developed a digitally-enhanced teaching unit collaboratively as their final assignment. Before submitting the units for assessment, each group received video recorded feedback from the instructor; pre-service teachers could use the feedback to make some changes to the units before submission.

At the end of each live class, pre-service teachers filled in an online self-evaluation questionnaire. The instructor used students' feedback, gathered through the online self-evaluation questionnaires, to monitor the course and make some changes if necessary. On the last day of class, the instructor introduced pre-service teachers to the theoretical framework, namely the community of inquiry model, adopted to design the course.

3. Conclusion

The fast digitisation process occurring in higher education has enabled course instructors to re-image their learning practices and spaces. Re-thinking online learning environments has provided language education practitioners with the opportunity to design online learning pathways fostering students' active learning and engagement to a very high degree.

This essay has illustrated how an instructor designed an online language education course fostering pre-service teachers' active learning and engagement through a flipped learning approach. The asynchronous and synchronous digitally-enhanced practices developed were targeted at developing pre-service teachers' higher-level thinking skills and deeper conceptual understanding of subject-specific content. Knowledge co-construction was scaffolded through the use of various digital and educational technologies and platforms instrumental in fostering collaborative learning and artefact creation.

References

Assunção, F. M., & Swennen, A. (2020). The COVID-19 pandemic and its effects on teacher education. *European Journal of Teacher Education*, *43*(4), 453-456. https://doi.org/10.1080/02619768.2020.1824253

Bates, T. (2019). *Teaching in a digital age*. Tony Bates Associates.

Bergmann, J., & Sams, A. (2012). *Flip your classroom: reach every student in every class every day*. Association for Supervision and Curriculum Development.

Bergmann, J., & Sams, A. (2014). Flipping for mastery. *Educational Leadership*, *71*(4), 24-29.

Bonwell, C. C., & Eison, J. A. (1991). *Active learning: creating excitement in the classroom* (ASHE–ERIC Higher Education Rep. No. 1). The George Washington University, School of Education and Human Development.

Børte, K., Nesje, K., & Lillejord, S. (2020). Barriers to student active learning in higher education. *Teaching in Higher Education*, 1-19. https://doi.org/10.1080/13562517.2020.1839746

Brinks Lockwood, R. (2014). *Flip it! Strategies for the ESL classroom*. University of Michigan Press. https://doi.org/10.3998/mpub.7110704

Brinks Lockwood, R. (2018). *Flipping the classroom: what every ESL teacher needs to know*. University of Michigan Press.

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: computer conferencing in higher education. *The Internet and Higher Education*, *2*(2-3), 87-105. https://doi.org/10.1016/S1096-7516(00)00016-6

Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical thinking, cognitive presence, and computer conferencing in distance education. *American Journal of Distance Education*, *15*(1), 7-23. https://doi.org/10.1080/08923640109527071

Lantolf, J., Poehner, M., & Thorne, S. L. (2020). Sociocultural theory and second language development. In B. VanPatten, G. Keating & S. Wulff (Eds), *Theories in second language acquisition* (3rd ed., pp. 223-247). Routledge. https://doi.org/10.4324/9780429503986-10

Lantolf, J. P., & Thorne, S. L. (2006). *Sociocultural theory and the genesis of second language development*. Oxford University Press.

Lee, D., Morrone, A. S., & Siering, G. (2018). From swimming pool to collaborative learning studio: pedagogy, space, and technology in a large active learning classroom. *Educational Technology Research and Development*, *66*(1) December, 95-127. https://doi.org/10.1007/s11423-017-9550-1

Lipmanowicz, H., & McCandless, K. (2014). *The surprising power of liberating structures: simple rules to unleash a culture of innovation*. Liberating Structures Press.

Marshall, H. W., & Kostka, I. (2020). Fostering teaching presence through the synchronous online flipped learning approach. *The Electronic Journal for English as a Second Language*, *24*(2), 1-14.

Marshall, H. W., & Rodriguez-Buitrago, C. (2017). The synchronous online flipped learning approach. *TEIS News – The Newsletter of the Teacher Educator Interest Section.* http://newsmanager.commpartners.com/tesolteis/issues/2017-03-15/6.html

Mazur, E. (1997). *Peer instruction: a user's manual*. Prentice Hall. https://doi.org/10.1063/1.881735

McTighe, J., & Wiggins, G. (2012). *Understanding by design framework.* Association for Supervision and Curriculum Development.

Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*, *93*(3), 223-231. https://doi.org/10.1002/j.2168-9830.2004.tb00809.x

Stefanou, C., Stolk, J. D., Prince, M., Chen, J. C., & Lord, S. M. (2013). Self-regulation and autonomy in problem- and project-based learning environments. *Active Learning in Higher Education*, 14, 109-122. https://doi.org/10.1177/1469787413481132

Vaughan, N. D., Cleveland-Innes, M., & Garrison, D. R. (2013). *Teaching in blended learning environments: creating and sustaining communities of inquiry*. Athabasca University Press.

Vygotsky, L. S. (1978). *Mind in society: the development of higher psychological processes*. Harvard University Press.

Intelligent CALL, granular systems and learner data: short papers from EUROCALL 2022
Edited by Birna Arnbjörnsdóttir, Branislav Bédi, Linda Bradley, Kolbrún Friðriksdóttir, Hólmfríður Garðarsdóttir, Sylvie Thouësny, and Matthew James Whelpton

Disclaimer: Research-publishing.net does not take any responsibility for the content of the pages written by the authors of this book. The authors have recognised that the work described was not published before, or that it was not under consideration for publication elsewhere. While the information in this book is believed to be true and accurate on the date of its going to press, neither the editorial team nor the publisher can accept any legal responsibility for any errors or omissions. The publisher makes no warranty, expressed or implied, with respect to the material contained herein. While Research-publishing.net is committed to publishing works of integrity, the words are the authors' alone.

Trademark notice: product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

Copyrighted material: every effort has been made by the editorial team to trace copyright holders and to obtain their permission for the use of copyrighted material in this book. In the event of errors or omissions, please notify the publisher of any corrections that will need to be incorporated in future editions of this book.