

Suzanne Ehrlich & Jemina Napier (Eds.). (2015) *Interpreter education in the digital age: Innovation, access, and change*. Washington, DC: Gallaudet University Press. ISBN 978-1-56368-638-2, 346 pp.

### Reviewed by Barbara Class

The stated aim of this book is to “provide a context for the application of technologies to interpreter education and to learning more broadly” (p. xvi). Accordingly, most of the twelve articles in the collection deal with the use of digital technology in interpreter training, with only three focusing on the technology used to aid actual interpreting performance and service delivery (see Kalina & Ziegler 2015). Most of the articles document the “middle period” in Sandrelli’s (2015) three-stage periodization of computer-assisted interpreter training, this being the phase in which the earlier offline use of technology (in either a *repository approach* or a *courseware approach*) is taken online, with a collaborative dimension. With regard to Schneider’s (2013) list of technologies used in education, half the studies relate to integrated learning management systems (e.g. BlackBoard or Moodle), which coincides with the prevalence of the courseware approach. The remaining studies mostly involve communication and collaboration tools and/or resource management tools, in two cases with a cognitive basis.

For the purpose of this review, the articles will be grouped under three major topics: the design of virtual learning environments (Articles 2, 3, 4, 7 and 9); specific technologies to train a given skill (Articles 1, 6, 8, 10 and 12); and learner experiences of online or blended courses (Articles 5 and 11).

In their article on “Digital innovation serving interpreter education in New Zealand”, **Annette Sachtleben and Ineke Crezee** describe the design of a virtual learning environment (VLE), complemented with additional technology (Blackboard, Blackboard Collaborate, audiovisual tasks, wikis and blogs), from a collaborative and mastery pedagogy point of view (Baxter-Magolda 1992). The target audience is composed of trainee interpreters in a pre-degree programme (post-baccalaureate). With the help of a questionnaire, the authors set out to evaluate students’ satisfaction with the learning environment, inquiring into their communications with online language peers, how they like using online learning tools, and the affective factors involved in using IT tools. The sample is made up of 10 students (accounting for 42% of all online students in the reference population) for the online cohort, and 21 students (i.e. 50% of all blended students) for the blended cohort. The main results of the study show that formative feedback,

recordings of online lectures and practicing with the materials are the most effective tools for learners of community interpreting. The authors conclude that allocating a language peer enhances engagement and motivation.

**Sabine Braun, Catherine Slater and Nicholas Botfield** evaluate the affordances of a 3D learning environment (Second Life), both from the perspective of interpreting students and from that of clients, gathering feedback on initial design and functionality, usability and pedagogy. The study, which takes place in the MA programme in business translation and interpreting at the University of Surrey, assesses the extent to which the IVY<sup>1</sup> 3D VLE can be used to effectively educate interpreting students. The evaluation of the students' perspective is conducted with the support of ethnographic and observational methods, to gain insights on how students used the environment for their self-study practice, plus a questionnaire on their level of technological expertise, the capacity of the VLE to support interpreting skills and its specific affordances. The evaluation of the clients' perspective is realized through an online questionnaire, including pre-test and post-test items on interpreting topics. The study sample comprises 22 students and 26 experienced professional clients: of these two groups, 16 and 11 completed the respective questionnaires. Results show that, among students, three groups – the distribution is not indicated – can be distinguished as far as design and usability are concerned: those who focus on good audio, ignoring the 3D capabilities; those who find the 3D environment distracting; and those who benefit from both avatars and the 3D scenario. Skills were developed, but real-life pressure could not be replicated in the virtual environment and interpreting tasks were thus made easier. Students developed learning strategies, particularly the *preparation-practice-reflection* iteration, but not to the expected degree. Clients found the environment valuable, even if not realistic, and did develop awareness of challenges related to working with an interpreter. Findings of this study served to design the follow-up EVIVA project.

**Mary H. Lightfoot** describes the VLE designed for a theoretical course, *Introduction to Interpreting*, in a continuing education programme, as well as the technology used (Blackboard, FuzeMeetings, Adobe Captivate, YouTube, blogs) to support the three forms of interaction – learner-content, learner-instructor and learner-learner (Moore 1989). The author also examines the three main groups making up the course's audience – baby-boomers, generation x and generation y – and their respective learning characteristics: for baby-boomers, case studies and examples; for generation x, problem solving, role play, games and hands-on activities; and, for generation y, group orientation, games and use of digital social media (Cekada 2012). The study then goes on to describe how the course will be upgraded in future, namely with gamification and semantic web capabilities.

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1. IVY and EVIVA projects: <http://virtual-interpreting.net/>

Lorraine Leeson, Harris Sheikh and Myriam Vermeerbergen describe the design of a blended course for Sign Language (SL) interpreting and explore how multimedia SL materials – which had been studied, and for which guidelines had been developed, in a previous project – influence the approach to learning in two programmes: a BA in Applied Language (Belgium) and a BA in Deaf Studies with specialization in Irish SL/English (Ireland). The VLE consists of Moodle migrated to Blackboard and video technologies, including annotation with ELAN, and is described using Khan's (2009) model. Interviews were conducted, and questionnaires were administered, with the aim of exploring the use of SL materials for academic purposes. In Ireland, the data was gathered through an interview with two academics and a questionnaire completed by 11 students (two deaf, nine hearing); in Belgium, it was collected through an interview with two academics plus a questionnaire completed by 13 students (12 deaf, one hearing). A key finding is that SL is used for work related to interpreting, and English/Dutch/Sign Writing for everything else (e.g., note-taking in SL with video is more complex than English/Dutch writing, and the latter is generally preferred). The authors recommend reviewing this imbalance, and the place of SL in academia in general.

Amanda R. Smith describes the design of assignments intended to build a discerning community (critical thinking, deep learning, reflective practice), and examines the effectiveness of community teaching through the perceived connectedness among cohorts in an Interpreting Studies MA programme. This programme is designed for professional signed and spoken-language interpreters who want to improve their skills, teach or conduct research.<sup>2</sup> The technology used consists of Google apps, Facebook, Skype, VoiceThread, Adobe Connect and Moodle. The author-instructor reports her personal experience, mentioning influences from other readings, mainly Kiraly (2000) and Pacansky-Brock (2012). She concludes that the most efficient tools to foster a community of learners are Google Docs, Facebook, VoiceThread, Google Hangouts, Adobe Connect and Moodle Discussion Boards.

In the first article in the group of chapters dealing with specific technologies, which also happens to be the first chapter in the book, **Jemina Napier and Suzanne Ehrlich** present a synthesis of two studies (Ehrlich & Vance 2015; Napier et al. 2013) with the iPad at centre stage. The first of these, a case study of direct vs indirect on-demand interpreting, aims at developing a framework for successful remote interpreting in the classroom. This is provided for deaf students, using video-based technology distributed via the iPad. The study, involving observation of one student, questionnaires – developed in a previous study – for both the student and supervisor to complete, and debriefing with the interpreter, assesses the use of

2. <http://www.wou.edu/graduate/ma-interpreting-studies/>

the iPad and its effect on the student's performance in the workplace. Results show a positive impact, albeit with some reservations in that use of the device can prove not only technically challenging but also, at times, distracting for the student's peers. In addition, the interpreter reported a lack of connectedness with the client during preparation. The second study, designed to test AudioNote for note-taking in consecutive, explores how the iPad can enhance the educational experience of an MA course in Chinese for practising and/or qualified interpreters. The iPad and AudioNote were used in conjunction with 40 apps for interpreter trainees. This is a participatory action-research study, involving three instructors and an unspecified number of interpreting students. Key results indicate that stakeholders perceived the device as capable of enhancing the learning and teaching experience, particularly in terms of practice, perception and engagement in improved learning contexts.

**Marc Orlando** aims to advance the field of interpreting with technology that supports note-taking performance, and also to discuss "consec-simul" as a potential "new" mode of interpreting. The study takes place in the setting of an MA in interpreting and translation studies; the technology used consists of the digital pen, ELAN video annotating software and video recording. A five-step scenario was implemented to ensure equality between language pairs, and a questionnaire was administered to investigate students' perception of the impact of the digital pen on note-taking. All 20 students taking the course in the second semester (representing six language pairs) filled in the questionnaire. Results show that introducing the digital pen as a metacognitive strategy is positive for skill development. The author conducted an additional study, with four professional English-French interpreters, to explore the "consec-simul" mode. Findings show greater accuracy and confidence when interpreting with the digital pen, but less eye contact – which, however, can be remedied by raising awareness of this point.

**Ronice Müller de Quadros and Marianne Stumpf** present educational development strategies highlighting the "deaf gain" – deafness seen as an added value – in a BA programme in Brazilian Sign Language Translation and Interpretation. This e-learning programme was developed in response to new Brazilian legislation establishing a sign language policy, in particular with respect to Libras, one of Brazil's official languages as used by the Deaf community. The technology used is based on specific features of knowledge acquisition by the deaf and on proven methods of creating videos in Brazilian SL featuring deaf people. The resulting empowerment of the Deaf community is visible in the labor market, including academia.

**Kati Lakner and Graham H. Turner's** aim is to use technology to harvest the evolving terminology between a deaf signer and an interpreter, and thus to document lexical variations as a step towards enhancing interpreters' professional

development in SL with the technological support of SemanticMediaWiki and a term bank. The study's theoretical framework combines theories of metalinguistic awareness, reflection and metacognition, with a focus on their benefits for professional development. An online questionnaire, developed in the first author's MA thesis, was sent to the 103 users of the term bank and received 39 responses. Key findings show that the term bank is used to enhance language skills, to retrieve information about language and its structures, to process and analyse language, to prepare for interpreting jobs and also to learn new concepts.

**Doug Bowen-Bailey** aims at identifying design principles to support informal learning by understanding the organizing principles of power, leadership and message framing within a context of SL learning. He describes how to support students in informal learning situations, particularly using social media fora, to generate learning.

In the first of the two chapters focusing on learner experiences, **Sedat Mulayim and Miranda Lai** compare learning experiences between an online<sup>3</sup> and a face-to-face interpreting programme in Dari (a Persian language), and investigate the effectiveness of the community of inquiry model (Garrison et al. 2000) for designing online interpreter training. They examine how three forms of presence (teaching, social, cognitive) are achieved in the face-to-face and online editions (25 and 14 students respectively) of a vocational training programme: the comparison is made by means of a validated instrument (Arbaugh et al. 2008), based on the community of inquiry model. Major findings – derived from descriptive statistics, without nuances of standard deviation – indicate that students' perceptions of the three forms of presence were highly favourable in both cohorts, and that development of the community of inquiry did not differ very much between the two.

Finally, **Vicki Darden, Emily K. Ott, Erin Trine and Sarah Hewlett** investigate the ways in which technology (the same as that mentioned by **Amanda R. Smith**) fostered or hindered collaboration among students across two cohorts in an MA in Interpreting Studies programme. Their conceptual framework combines theories related to online learning and teaching, interaction, community, social presence and virtual communication. A questionnaire plus participant observation allowed for an insider view and elicited students' experiences with technology, examining how and why they connected to peers. The questionnaire was completed by 12 (out of 17) students in Cohort 1 and 10 (out of 14) students in Cohort 2. Results highlight four themes related to collaborating with, and through, technology: 1) the flexibility of asynchronous interactions; 2) the ability to use different technologies for different purposes; 3) the convenience of interaction through a digital

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3. In this particular form of online programme, students came to campus for several three-hour videoconferencing sessions per week, but without meeting the instructor physically.

medium; and 4) the complicated nature and potential failure of a technological medium, leading to technology fatigue.

The articles collected in this book, as good examples of the continuum between practitioners' accounts and more academically oriented research reports on the topic of interpreting and technology (Orlando 2016; Pöchlacker 2016; Shlesinger 2009), can be of interest to various audiences. Since "academic knowledge is a second-order form of knowledge that seeks abstractions and generalizations based on reasoning and evidence", with "codification, transparency, reproduction and communicability" as critical components (Bates 2015: 233), we would recommend empowering interpreting practitioners with robust applied research methodologies – including action research (Bradbury 2015), case studies (Yin 2014) and educational design research (McKenney & Reeves 2012). Researchers would then be able to collaborate, and build on practitioners' findings, so as to identify topics of interest and research them with theory-testing and/or theory-building approaches. Regarding the topic discussed in this volume, taking a closer look at the field of educational technology (approaches, best practices, frameworks, research instruments, etc.) and the inclusion of these features in interpreter education could be a source of inspiration and awareness of how they contribute to certain paradigms – for instance, in the media debate (Clark 1994; Kozma 1994). While interpreting as a field of research has come to a turning point, taking stock of the studies conducted until now in the field (e.g. Pöchlacker 2016), it is important to acknowledge the interdependence between technology (Jekat 2015) and the human skill of interpreting. This interdependence can be compared to that between a photograph and its negative: what lies dormant within the skill is brought into relief, extended and enhanced through technology.

## References

- Arbaugh, J. B., Cleveland-Innes, M., Diaz, S. R. & Garrison, D. R. (2008). Developing a community of inquiry instrument: Testing a measure of the community of inquiry framework using a multi-institutional sample. *Internet and Higher Education* 11 (3/4), 133–136. doi: 10.1016/j.iheduc.2008.06.003
- Bates, A. W. (2015). *Teaching in a digital age: Guidelines for designing teaching and learning for a digital age*. Online open textbook.
- Baxter-Magolda, M. (1992). *Knowing and reasoning in college: Gender-related patterns in students' intellectual development*. San Francisco: Jossey-Bass.
- Bradbury, H. (2015). *The Sage handbook of action research* (3rd ed.). Los Angeles/London/New Delhi etc.: Sage. doi: 10.4135/9781473921290
- Cekada, T. (2012). Training a multigenerational workforce: Understanding key needs & learning styles. *Professional Safety*, 57 (3), 40–44.

- Clark, R. (1994). Media will never influence learning. *Educational Technology Research and Development*, 42 (2), 21–29. doi: 10.1007/BF02299088
- Ehrlich, S., & Vance, K. (2015). Innovative interpreting: iPad technology as a bridge to interpreting services in a post-secondary setting. *Translation & Interpreting*, 7 (2), 60–74.
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *Internet and Higher Education* 2 (2), 87–105. doi: 10.1016/S1096-7516(00)00016-6
- Jekat, S. (2015). Machine interpreting. In F. Pöchhacker (Ed.), *Routledge encyclopedia of interpreting studies*. London/New York: Routledge, 239–242.
- Kalina, S. & Ziegler, K. (2015). Technology. In F. Pöchhacker (Ed.), *Routledge encyclopedia of interpreting studies*. London/New York: Routledge, 410–412.
- Khan, B. (2009). The global e-learning framework. In S. Mishra (Ed.), *Stride handbook 8: E-learning*. New Dehli: Indira Ghandi National Open University, 42–51.
- Kiraly, D. (2000). *A social constructivist approach to translator education: Empowerment from theory to practice*. Manchester: St Jerome Publishing.
- Kozma, R. (1994). Will media influence learning? Reframing the debate. *Educational Technology Research and Development* 42 (2), 7–19. doi: 10.1007/BF02299087
- McKenney, S. & Reeves, T. (2012). *Conducting educational design research*. London/New York: Routledge.
- Moore, M. (1989). Three types of interaction. *American Journal of Distance Education* 3 (2), 1–6.
- Napier, J., Song, Z. & Ye, S. (2013). Innovative and collaborative use of iPads in interpreter education. *The International Journal of Interpreter Education* 5 (2), 13–42.
- Orlando, M. (2016). *Training 21st century translators and interpreters: At the crossroads of practice, research and pedagogy*. Berlin: Frank & Timme.
- Pacansky-Brock, M. (2012). *Best practices for teaching with emerging technologies*. New York: Routledge.
- Pöchhacker, F. (2016). *Introducing interpreting studies* (2nd ed.). London/New York: Routledge.
- Sandrelli, A. (2015). Computer assisted interpreter training. In F. Pöchhacker (Ed.), *Routledge encyclopedia of interpreting studies*. London/New York: Routledge, 75–77.
- Schneider, D. (2013). Educational technologies. [http://edutechwiki.unige.ch/en/Educational\\_technologies#A\\_flat\\_typology\\_of\\_major\\_educational\\_software\\_categories](http://edutechwiki.unige.ch/en/Educational_technologies#A_flat_typology_of_major_educational_software_categories) (accessed 26 August 2016).
- Shlesinger, M. (2009). Crossing the divide: What researchers and practitioners can learn from one another. *Translation & Interpreting* 1 (1), 1–14.
- Yin, R. K. (2014). *Case study research design and methods* (5th ed.). Thousand Oaks : SAGE Publications.