

TPACK-in-Action: An Innovative Model to Help English Teachers Integrate CALL

Shu-Ju Diana TAI^{a*} & Hsueh-Hua CHUANG

^a *Iowa State University, USA*

^b *National Sun Yat-Sen University, Taiwan*

* shujutai@gmail.com

Abstract: In this paper, we propose a TPACK-in-Action model to guide the design of the CALL Workshop in helping inservice English teachers develop their TPACK proficiency and integrate CALL in their classrooms. Following the five steps design: (1) Modeling; (2) Analysis; (3) Demonstration; (4) Application; and (5) Reflection, the workshop centers at helping teachers learn to integrate CALL by doing CALL within the TPACK framework [22]. In other words, the workshop aims for teachers to walk away knowing how to teach with technology with pedagogical decisions as well as to transfer what they have learned in the workshop to their teaching in classrooms

Keywords: CALL, teacher education, professional development, TPACK-in-Action

Introduction

It has become increasingly clear that the future of CALL is closely tied to language teacher education because teachers are key to the realization of its educational potentials [13]. They are the gatekeepers, determining whether or what technologies enter the classroom and how they are used [6]. Moreover, rapidly changing CALL technology and the widening scope of technology-enhanced environment place more weight on the significance of teachers' perceptions and actions in order to successfully implement technology in the L2 classroom [8]. In other words, teachers "need to know why they do what they do" (p. 11) [15] in the technology enhanced L2 teaching and learning environment, which lends itself to the importance of teacher education in CALL.

1. Literature Review

Given the significance of CALL in language teacher education, one important factor related to CALL teacher education is the content and approach employed to deliver the training course(s). Extending the notion about the approach adopted to conduct the CALL education, Levy [19] proposed that a CALL course should be looked at from a more holistic view rather than whether or not teachers are trained to be computer experts. In addition, Chapelle and Hegelheimer [3] stressed the need to clarify the key competences of language teachers in the 21st century to "effectively and critically engage in technology-related teaching issues . . . within a world that is decisively supported and interconnected by technology" (p. 300). In responding to this notion, Peters [23] specifically identified that there is a need to help English teachers learn to integrate technology effectively in the classroom rather than be technical or technology experts. Moreover, many CALL researchers have made suggestions that language teachers should develop a variety of

competences and knowledge in order to integrate technology effectively within their classroom settings [5, 9, 14, 20]. The TPACK framework [22] advocates the incorporation of the three fundamental knowledge types among teachers, content knowledge (CK), pedagogy knowledge (PK), and technology knowledge (TK) and emphasizes the importance of the interactions and the complexities among all three basic knowledge domains. In other words, the TPACK framework goes beyond looking at these three knowledge domains in isolation but examines the new kinds of knowledge that gather at the intersections between and among the three domains, pedagogical content knowledge (PCK), technological content knowledge (TCK), technological pedagogical knowledge (TPK), and TPACK [18]. In sum, a well-organized and well-prepared training course should help prepare teachers to obtain and develop enough knowledge relating to language teaching technology solutions [11, 17] i.e., TPACK competency. Moreover, teachers need experiences with consistent modeling of effective use of technology in order to become familiar enough with the use of different forms of technology and see the wider range of affordances available [1, 2, 12]. Therefore, this study proposes that the CALL intervention be based on an innovative approach, TPACK-in-Action, to help English teachers develop their TPACK competency and integrate technology in their teaching.

2. The CALL Workshop: TPACK-in-Action

Adapted from the TPACK-in-Practice model [7], the TPACK-in-Action model proposes that a CALL teacher training follows the five steps: [*Modeling*] The CALL workshop starts with modeling an activity to situate teachers in context as Chapelle [4] noted, “The way that students will learn to do applied linguistics with technology is by learning applied linguistics through technology” (p. 31). During this step, teachers have the opportunities to see how a CALL activity/task can be implemented in classrooms [12, 16, 17]. [*Analysis*] Acknowledging the notion that teachers need to know not only how to use technology but also understand why they are doing so [3], an analysis of the modeled activity within the TPACK framework will be implemented to help teachers understand the rationale behind the choice of tools and pedagogy incorporated into the content in the modeled activity. [*Demonstration*] Through demonstration, teachers will learn about features of tools incorporated in the modeled activity. Moreover, alternative tools will also be introduced to allow teachers more options to meet learners’ needs. [*Application*] Teachers will apply what they have learned, i.e., creating a lesson plan based on their curriculum and teaching it. [*Reflection*] Teachers will take the opportunity to reflect on their learning and development. As research noted, one of the most important factors that fosters teachers’ professional development is reflective practice because critical reflection raises teachers’ awareness about teaching, enables deeper understanding, and triggers positive changes [10, 21].

3. Conclusion

Different from the traditional techno-centric technology approach in which teachers developed technology knowledge, the TPACK-in-Action CALL Workshop aims to situate technologies in contexts, in which teachers learn how to incorporate technology to suit the instructional and learning needs. In addition, the ample opportunities to engage in hands-on activities, i.e., to integrate CALL by doing CALL as Chapelle [4] noted, contribute to teachers’ greater confidence in their instructional ability and lead to more successful teaching experiences [24]. The goal of the TPACK-in-Action workshop is for teachers to

walk away with the ability to teach with technology with pedagogical decisions and to transfer what they have learned in the workshop to their teaching in classrooms.

References

- [1] Bird, T., & Rosaen, C. L. (2005). Providing authentic contexts for learning information technology in teacher preparation. *Journal of Teaching and Teacher Education (JTATE)*, 13(2), 211-23.
- [2] Brook, C. & Oliver R. (2005). Online learning communities and community development. In P. Kommers & G. Richards (Eds.), *Proceedings of Ed-Media 2005, World Conference on Educational Multimedia, Hypermedia & Telecommunications* (pp. 2518-2525). Norfolk, USA: Association for the Advancement of Computing in Education.
- [3] Chapelle, C. & Hegelheimer, V. (2004). The English language teacher in the 21st century. In S. Fotos & C. Browne (Eds.), *New Perspectives on CALL for Second Language Classrooms* (pp. 299-316). Mahwah, NJ: Lawrence Erlbaum.
- [4] Chapelle, C. A. (2003). *English Language Learning and Technology*. Philadelphia, PA: John Benjamins Publishing Company.
- [5] Chishome, I. M. & Beckett, E. C. (2003). Teacher preparation for equitable access through the integration of TESOL standards, multiple intelligences and technology. *Technology, Pedagogy and Education*, 12(2), 249-275.
- [6] Cuban, L. (1986). *Teachers and Machines: The Classroom Use of Technology Since 1920*. New York, NY: Teacher College Press.
- [7] Figg, C. & Jaipal, K. (2012). TPACK-in-Practice: Developing 21st Century Teacher Knowledge. In P. Resta (Ed.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2012* (pp. 4683-4689). Chesapeake, VA: AACE.
- [8] Godwin-Jones, R. (2002). Technology for prospective language teachers. *Language Learning & Technology*, 6(3), 10-14.
- [9] Hegelheimer, V. (2006). When the technology course is required. In P. Hubbard & M. Levy (Eds.), *Teacher Education in CALL* (pp. 117-133). Philadelphia, PA: John Benjamins Publishing Company.
- [10] Ho, B. & Richards, J. C., (1993). Reflective thinking through teacher journal writing myths and realities. *Prospect*, 8, pp. 7-24.
- [11] Hong, K. H. (2010). CALL teacher education as an impetus for L2 teachers in integrating technology. *ReCALL*, 22, 53-69.
- [12] Hoven, D. (2007). The affordances of technology for student teachers to shape their teacher education experience. In M. A. Kassen, R. Z. Lavine, K. Murphy-Judy & M. Peters (Eds.), *Preparing and Developing Technology-Proficient L2 Teachers* (pp. 133-163). San Marcos, TX: CALICO.
- [13] Hubbard, P. (2008). CALL and the future of language teacher education. *Calico Journal*, 25(2), 175-188.
- [14] Hubbard, P. (2004). Learner training for effective of CALL. In S. Fotos & C. Browne (Eds.), *New Perspectives on CALL for Second Language Classrooms* (pp. 45-67). Mahwah, NJ: Lawrence Erlbaum.
- [15] Hubbard, P. & Levy, M. (2006). The scope of CALL education. In P. Hubbard & M. Levy (Eds.), *Teacher Education in CALL* (pp. 2-20). Philadelphia, PA: John Benjamins Publishing Company.
- [16] Hughes, J. (2005). The role of teacher knowledge and learning experiences in forming technology-integrated pedagogy. *Journal of Technology and Teacher Education*, 13(2), 277-302.
- [17] Kessler, G. & Plakans, L. (2008). Does teachers' confidence with CALL equal innovative and integrated use? *Computer Assisted Language Learning*, 21(3), 269-282.
- [18] Koehler, M. and Mishra, P. (2008). Introducing TPCK. In: AACTE Committee on Innovation Technology (Eds.). *Handbook of Technological Pedagogical Content Knowledge (TPCK) for Educators* (pp. 3-29). London: Routledge Taylor and Francis Group.
- [19] Levy, M. (1997). A rationale for teacher education and CALL: The holistic view and its implications. *Computer and the Humanities*, 30, 293-302.
- [20] Levy, M., & Stockwell, G. (2006). *CALL Dimensions: Options and Issues in Computer-Assisted Language Learning*. New Jersey: Lawrence Erlbaum Associates.
- [21] Liou, H. (2001). Reflective practice in a pre-service teacher education process for high school English teachers in Taiwan. *System*, 29(2), 197-208.
- [22] Mishra, P. & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for integrating technology in teacher knowledge. *Teachers College Record*, 108(6), 1017-1054.
- [23] Peters, M. (2006). Developing computer competencies for pre-service language teachers: Is one course enough? In P. Hubbard & M. Levy (Eds.), *Teacher Education in CALL* (pp. 153-165). Philadelphia, PA: John Benjamins Publishing Company.
- [24] Ross, J. A., Hogaboam-Gray, A. & Hannay, L. (1999) Predictors of teachers' confidence in their ability to implement computer-based instruction. *Journal of Educational Computing Research*, 21, (1), 75-97.