Chapter 2
The Secret Agent Society: Upskilling Teachers in the Delivery of a Game-Based Social Skills Youth Program

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ABSTRACT
In recent years, there has been a worldwide commitment to integrating technology into classrooms to train students in the computer skills they will need to be workforce ready. This chapter provides an overview of the Secret Agent Society – Whole of Class Project: a randomized controlled trial of a gaming-based social skills training curriculum that was conducted in Grade 5 classrooms throughout Australia. The chapter explores the content, structure, and delivery format of the social skills program, together with the design and implementation of an online teacher training course to accompany it. Teacher feedback on the online teacher training course is presented, together with recommendations for enhancing the design, implementation, and evaluation of future online professional development courses for school staff.

INTRODUCTION
In recent years, billions of dollars have been spent in classrooms across the globe to provide students with access to technology. This has been done to improve students’ learning outcomes and to train them in the computer skills they will need to be competitive in tomorrow’s workforce. A 2009 survey by the National Centre for Education Statistics (NCES) showed that in the US, 99% of teachers had computers accessible in their classroom every day and 95% of computers had Internet access (Gray, Thomas & Lewis, 2010). Despite this widespread availability of technology in modern-day classrooms, however, survey findings showed that only 40% of K-12 teachers reported using technology “often” to support students’ learning (Gray et al., 2010).

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Research suggests that the task of integrating technology into classroom instruction in a meaningful and innovative way remains challenging for several reasons. Beyond having the necessary hardware and software, school leaders play a pivotal role in determining teacher attitudes and utilization of technology within classrooms. As described by Weng and Tang (2014), in today’s modern schools, school leaders’ responsibilities include ensuring that teachers have the skills and confidence to use new technology successfully, establishing mechanisms to provide school staff with real-time technical support, providing staff with access to relevant technological resources and setting up mechanisms for them to collaborate with each other to develop their information and communication technology (ICT) skills.

Pittman and Gaines (2015) highlight the time required to create and implement lesson plans that integrate technology as one of the greatest barriers to primary school teachers using it in the classroom. Pivotal to addressing this issue is access to high quality professional development (PD) to improve teachers’ ability to design and implement tech-enhanced curricula quickly and effectively. Common criticisms of technology-related PD for teachers are that they are too general and not subject specific, present too much information within a short period of time for teachers to digest, and introduce technologies that teachers do not have access to (An and Reigeluth, 2012).

Tweed (2013) recommends that teacher tech-PD should focus on enhancing teacher attitudes and beliefs relating to technology and should provide teachers with experiences that enable them to see ‘technology in action’: that is, opportunities for them to see technology being successfully integrated into classrooms in a fast, practical and effective way. Desimone (2009) also speaks to the importance of effective teacher PD involving active learning and collective participation. Without the integration of these recommendations, research suggests that PD focused on technology integration does not translate into improved adoption of technology by teachers in their classrooms (Pittman & Gaines, 2015).

To improve the convenience, availability and cost-effectiveness of teacher PD, there has been a recent increase in the number of online teacher PD programs available (Bates, Phalen & Moran, 2016; Edinger, 2017). Online courses allow teachers to access PD material in a manner that is optimally convenient for them. Hybrid PD programs offer the advantages of online PD programs and have the added bonus of in-person learning opportunities. Such programs enable teachers to review online material, and to receive support from peers and/or experts in answering questions and creatively applying the content to the students in their classrooms. This collaborative learning framework holds great promise in increasing teachers’ adoption of tech-inspired curricula after participating in a content-specific PD event (Bates et al., 2016). With these recommendations in place, recent studies have shown online and face-to-face teacher PD to be equivalent in their rates of curriculum implementation post-training (Fisher, Schumaker, Culbertson & Deshler, 2010; Fishman et al., 2013; Masters, de Kramer, O’Dwyer, Dash & Russell, 2012).

Research supports the effectiveness of technologically innovative classroom resources and programs in improving students’ eating habits (Chamberland et al., 2017), students’ abilities to conduct scientific experiments (Wang et al., 2014) and their mathematical knowledge and understanding (Bicer & Capraro, 2017). While there is also recognition of the value of computer-assisted interventions in improving school mental health and students’ social-emotional skills (e.g. Livet et al., 2017), evaluations have largely focused on individual- or small-group interventions delivered by specialist school staff to students with significant behavioral or emotional issues. Examples include the Stressbusters program for teenagers with depression (Abeles et al., 2009), the Coping Cat program for youth with anxiety (Khana & Kendall, 2008) and the Secret Agent Society small group program for children on the Autism Spectrum (Beaumont, Rotolone & Sofronoff, 2015; Einfeld et al., 2017).