

Preface

Have you ever observed a person playing a video game? Ever witnessed the intense range of emotions, extreme task commitment and engagement, and singular focus a player experiences while gaming? Ryan's seven-year-old son, Connor, amazed us with his proficiency in playing games on the family game console or tablet. Ryan was guilty of starting Connor on this path to early gaming. At the ripe old age of 2, Connor was visiting *Starfall.com* to learn about phonics and letter recognition. This interactive site was the gateway to more advanced gaming experiences such as *Angry Birds*, *Fruit Ninja*, *Star Wars Legos*, and, more recently, *Minecraft*.

What was truly amazing with Connor's gameplay was all the content he was learning. Starting with *Starfall.com*, Connor discovered digital games had something to teach him. Similar to videos, songs, and books, Connor considered digital games as an educational media format—one that will continue to evolve in its presentation and message for players.

Video games aren't just for kids. Nicky is an avid gamer. She loves playing *Angry Birds* (at all hours of the day and night). For those of you who have never heard of it, *Angry Birds* is a strategy video game that immediately grabs gamers' attention with its silly premise and fun gameplay. Despite its simple design, the game explores multiple concepts and skills in a wide range of curriculum areas.

And it's not just *Angry Birds*. There's a treasure trove of interesting and relevant games that have the potential to provide powerful learning experiences for students.

A vast majority of the digital world plays video games as a pastime or hobby. By 2015, video game sales are projected to reach \$112 billion worldwide. In the United States, over 63 percent of the population have played video games within the past 6 months. In China, over 338 million people are now connected to the Internet and approximately two-thirds of them are online gamers. Children and adults, locally and globally alike, are hooked on this immersive media phenomenon.

Many living in the digital generation have never experienced a world without Mario, Master Chief, or *The Sims*. Outside of school, they play hours of video games each week. While playing video games in their spare time, they are highly focused, they take on all challengers, they work collaboratively, solve problems, receive instant feedback and gratification, and ingest and retain a large amount of information quickly, with amazingly accurate recall.

They have become experts at analyzing gameplay, interpreting storylines, and ingesting raw game data. Imagine if schools could take advantage of the popularity and positive aspects of digital games during the learning process.

Imagine if students would play to learn: they would take risks, work productively alone or in groups, strive for perfection, focus on a single task for an extended period of time, fail without stigma, persevere, work toward goals, and learn through experience, all while having fun.

Making School a Game Worth Playing: Digital Games in the Classroom makes the case for using gaming to instruct the digital generations. Students prefer to use the same digital tools and have the same digital experiences they are accustomed to using at home in a setting with the explicit promise to reshape their minds into a powerful instrument for future success—schools.

This book helps parents, educators, and school leaders see the benefits of digital games and gameful design and provides readers with compelling evidence that digital games present information using a multi-sensory approach, which appeals to the learning preferences of digital learners. Digital games also provide academic content and challenge in a manner appealing to the human brain. Going beyond theory and research, this text also provides pragmatic ways to find, evaluate, and integrate digital games into instruction at every instructional level.

The global gaming phenomenon also inspires instruction outside of digital gameplay. With a growing concentration on science, technology, engineering, art, and mathematics (STEAM) initiatives, digital game design has become an incubator for 21st-century skills and a model for teaching the liberal arts in today's classrooms. Finally, gamification—or the gameful design movement—has real potential to transform learning environments, using gaming mechanics outside of a digital game with challenge, meaningful context, and other measures working in unison to provide motivation and engagement for all learners.