media studies, and literary history and print culture. Researchers in American culture more generally will find much of interest in Guerra's recovery and analysis of board games in the world of nineteenth-century consumer culture. Above all, Guerra offers an important advance in thinking about games in relation to the major currents of American history. More than a reflection of ideology or a product of social relations, games are sites where individuals could rehearse and transform their repertoires of social life.

—Chris Dingwall, *Oakland University, Rochester, MI*

Resonant Games: Design Principles for Learning Games that Connect Hearts, Minds, and the Everyday

Eric Klopfer, Jason Haas, Scot Osterweil, and Louisa Rosenheck
Cambridge, MA: The MIT Press, 2018. Series foreword, foreword by Colleen Macklin, references, and index. 253 pp. $40.00 cloth. ISBN: 9780262037808

The field of educational game design and development in digital media is still young and rapidly evolving. Emerging technologies provide new possibilities for content, deployment, and means of distribution. This plethora of opportunities has unfortunately also fostered the development of many products being labeled "educational games" without any fact-based foundation for making this claim. Even the terminology for how to describe this kind of work seems constantly in flux. Games that

seek to educate players and change post-game player behavior may be called serious games, games for impact, games for change, and applied games (among other terms). This volume seeks to establish a rigorous foundation and clear guidelines for practice to enable the production of what the authors call "resonant" games—games that "create deep learning experiences inextricably connected to the educational ecosystem they exist in" (p. 3).

Using a series of examples from games that they have designed, built, and distributed, the authors lay out twenty design principles for creating high-quality, high-impact game experiences for school-aged children. Many of these are standard practice for good game design in general, but others are tailored to specific challenges faced by designers developing for the K–12 system such as working within the requirements of educators' curricular and standards-testing goals while also improving the quality of the education: "The approach we've taken in *Radix* and other projects is to design a game that covers the shallower content necessary in schools but that also builds in activities that foster deeper thinking" (p. 124).

The twenty principles address critically important features of game development such as extensive use of focus groups and play testing to ensure that the content and structure of the games is appropriate for the intended audience. Step-by-step descriptions of the iterative process of game design are tied to the game examples to demonstrate exactly how these principles can be applied in practice. The section on data is especially useful. Guidance is provided on how to

decide what data to collect during game play and how the data can be used to both inform player progression through the game and to assess the efficacy of the intervention overall. Reliable outcomes assessment is key to demonstrating the utility of spending the time, money, and energy required to design and implement high-quality games in schools. The chapter on measuring success discusses the difficulty of measuring some of the more ineffable aspects of deep learning and also provides tools to help do so.

The book's final chapter addresses the current craze for gamification and makes it clear that the design practices outlined in the book differ importantly from the many ways that gamification has been marketed as a cure-all for society's problems. As the authors emphasize at the start of the book, games must be embedded and contextualized to have a lasting impact on players. In this final section, they only touch on one of the most important issues for games in this space—how to get good games to the audiences that need them most. Despite all the effort that goes into designing demonstrably effective games, it is very difficult to distribute them to any significant percentage of children either in the United States or abroad. There are many structural and political challenges to introducing new elements into school curricula, but unless more efforts are made to address them, resonant games will not reach those who need them most.

Resonant Games is an excellent book, written by experienced educators and game designers, that provides both practical suggestions for good educational game development and the theoretical under-

pinnings for the principles the authors espouse. Good quality black and white illustrations also support the text. I highly recommend this book.

—Elena Bertozzi, *Quinnipiac University, Hamden, CT*

Future Gaming: Creative Interventions in Video Game Culture

Paolo Ruffino
London, England: Goldsmiths Press, 2018. References and index. 145 pp. $30.00 hardcover. ISBN: 9781906897550

In the introduction to *Future Gaming: Creative Interventions in Video Game Culture*, Paolo Ruffino notes that the game industry has been obsessed with predicting its own future as a force for world changing even as it is in the midst of an identity crisis (and, notably, a labor crisis). The narrative of games is certainly forward facing: whole conventions are dedicated to revealing the next big thing. Yet optimistic views of a continually progressive future for gaming do not reconcile well with a cultural moment that includes "gamergate" —a culture war over "gamer" identity that started with an attack on game designer Zoe Quinn by an ex-partner and escalated to include attacks on feminist or inclusive voices in game design, journalism, and academia—and its lingering, inescapable, aftermath. Ruffino notes that "these stories about the medium only hide the complexities of the problems they seek to resolve and are reassuring precisely because they do not change anything" (p. 6). Ruffino