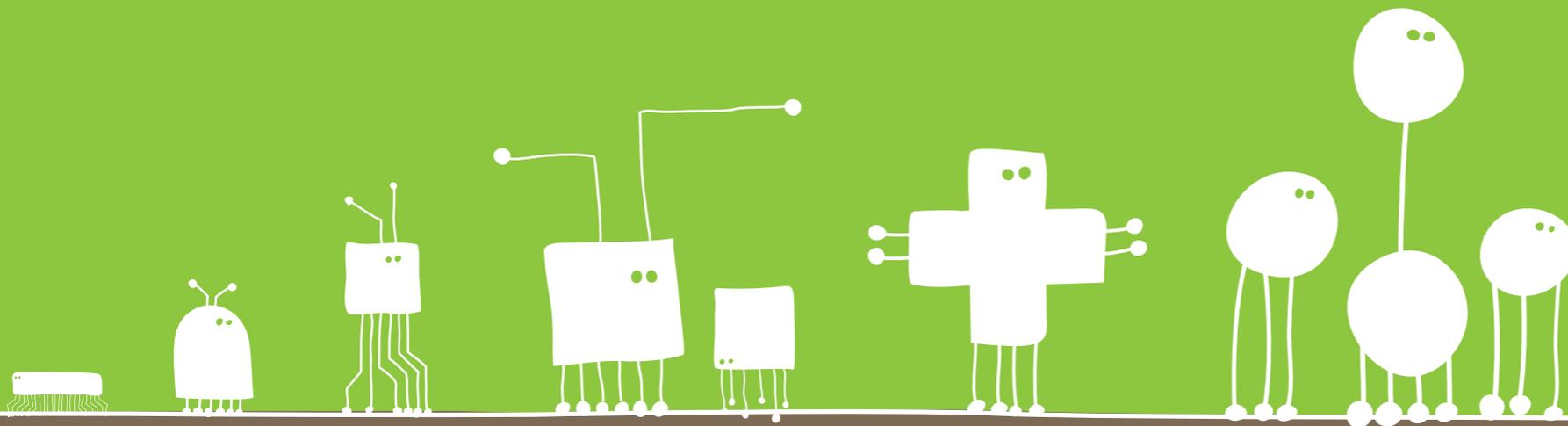


Games for a digital age:

K-12 market map and investment analysis



John Richards, Ph.D.
Leslie Stebbins, M.Ed.
Kurt Moellering, Ph.D.

Winter 2013
The Joan Ganz Cooney Center at Sesame Workshop

“Imagine if kids poured their time and passion into a video game that taught them math concepts while they barely noticed, because it was so enjoyable.”

- Bill Gates, in his speech to the Education Commission of the States’ National Forum on Education Policy, July 11, 2012

This report analyzes the sales and market potential for digital learning games in the institutional K-12 market. Our analysis is the result of extensive market research and a series of fifty structured interviews conducted from June 2011 through July 2012. These interviews were with leaders from the developer and publishing industries, and from the government, foundation, investment, and research communities.

Schools provide a significant opportunity for investors, publishers, and learning game developers: they are a \$600 billion market (Market Data Retrieval, 2011). However, they are also a complex market that may seem difficult to access because few rules that

apply on the consumer side apply to the K-12 institutional space.

This report provides a blueprint for those wishing to succeed in the institutional school space. It defines the two essential areas that must be understood to successfully sell digital learning games to schools: the K-12 learning game landscape and the K-12 institutional market.

The first part, “*Defining the K-12 Learning Games Landscape*,” concludes that:

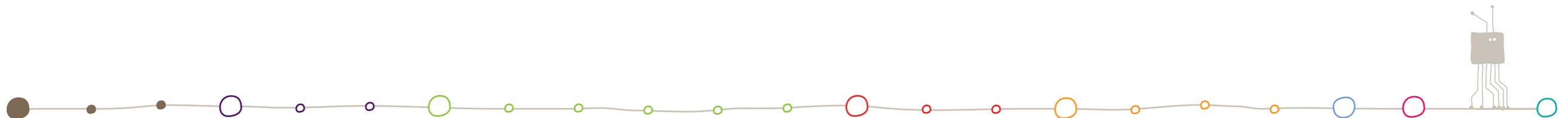
- Learning games are not a single type. Rather, they are best understood in terms of the functions they serve in the school context.
- In terms of selling to the K-12 market,

understanding the continuum from short-form to long-form games is critical.

- Short-form games provide tools for practice and focused concepts. They fit easily into the classroom time period and are especially attractive to schools as part of collections from which individual games can be selected as curricular needs arise.

- Long-form games have a stronger research base than short-form games and are focused on higher order thinking skills that align more naturally with new common core standards. These games do not fit as easily into the existing school day or classroom time period, but are the source of new experimentation in the research community and a variety of school contexts.

The second part, “*Selling to Schools*,” defines the complex and expansive K-12 institutional market, as well as systemic barriers to entry for any new product into the market. However, we also identify recent enabling trends that should give investors, game developers, and publishers optimism moving forward.



The systemic barriers to entry include:

- the dominance of a few multi-billion dollar players;
- a long buying cycle, byzantine decision-making process, and narrow sales window;
- locally controlled decision making that creates a fragmented marketplace of individual districts, schools, and teachers;
- frequently changing federal and state government policies and cyclical district resource constraints that impact the availability of funding;
- the demand for curriculum and standards alignment and research-based proof of effectiveness; and
- the requirement for locally delivered professional development.

However, recent trends provide an increasingly positive arena for learning games and other digital products, including:

- the move to one-to-one computing in schools and the rise of a “Bring Your Own Device” (BYOD) infrastructure for learning;
- the widespread acceptance and purchase of interactive white boards;

- the improvement of school IT infrastructure and access to the Internet;
- the 2010 National Education Technology Plan;
- a strong focus on Science, Technology, Engineering, and Math (STEM) skills, and more broadly, on higher-order thinking skills;
- an increasing move in schools from print to digital materials and from a highly structured to a somewhat flexible textbook adoption process;
- the increasing interest in Personalized Learning Environments (PLEs) and adaptive engines; and
- an expanding base of research that shows the effectiveness of long-form games in learning.

We believe that the information presented here—combining an understanding of the learning-game landscape and the K-12 market—offers a unique perspective that will allow marketers and investors to enter the school space.

Ultimately, “Games for a Digital Age” recommends that marketers and investors:

- produce collections of short, focused games, each of which fits easily into the single-subject, forty-minute classroom. There is already a roadmap and market that works for these types of games.
- affiliate selectively with school reform leaders to help move schools towards content-rich, deep curricula that foster critical thinking and problem solving. This is a longer process, but the types of games produced for such an environment are better supported by research. Furthermore, a deeper involvement with schools offers game developers the opportunity to cement exclusive, long-lasting relationships with a developing market.

