CREATING EFFECTIVE GAMES FOR IMPACT
THROUGH MULTI-STAKEHOLDER PARTNERSHIPS

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Abstract
This white paper from CPB and PBS is intended to contribute to a national conversation on the future of the field of games for impact, that is, games for learning, health, and social change. The authors examine the promise of impact games; recognize multi-stakeholder partnerships as the strategy to design, distribute, and evaluate them; assert the critical role that public media plays in fostering such partnerships; and identify the need for more coordination across and within sectors to maximize impact.

Introduction: A New Sputnik Moment
More than 50 years after the former Soviet Union’s launch of the Sputnik orbiter in 1957 prompted a national commitment to education and science investments, our nation faces a new Sputnik moment. This time we are faced with the reality that America’s children are falling far behind children from other countries in reading, math, and science proficiency. As before, overcoming this great challenge again requires a multi-sector commitment to education and innovation.

Today, game-based learning represents a promising tool in America’s digital toolbox to meet the national imperative of preparing our kids for the 21st century workforce. To meet the new landscape of educational challenges that America faces, innovative partnerships that leverage and expand the power of game-based learning are critical. Public media is at the center of several multi-sector partnerships that are harnessing educational video games to narrow the achievement gap and better prepare our nation’s children for success in school and life.

Recognizing Interactive Games as Powerful Learning Tools
In 2009, The Joan Ganz Cooney Center published a report entitled Game Changer: Investing in digital play to advance children’s learning and health. The authors of Game Changer assert that quality educational games have tremendous untapped potential to harness children’s enthusiasm and play a role in transforming learning in America. The report called upon public media to continue its pioneering efforts to accommodate the needs and interests of children living in a digital age.

Public media has been doing just that, investing its creative and collaborative might to orchestrate an alliance of children’s producers, game developers, technologists, academics, researchers and a diverse network of educational stakeholders led by local
public television stations and their on-the-ground partners to reach and serve children, especially those in high-need communities. It is this critical network of cross-sector partners and stakeholders that contributes to the success of our programs and delivers the biggest impact for young learners.

Perhaps the best example of this cross-sector collaboration is a unique federal program called Ready To Learn. Under a grant from Congress and the U.S. Department of Education’s Office of Innovation and Improvement, PBS and CPB are serving as the hub for a multi-stakeholder partnership that produces, disseminates and researches the impact of interactive content designed to help children ages 2-8 learn math and literacy skills. Where the Game Changer report opened many people’s eyes to the potential of games for learning, initiatives like Ready To Learn demonstrate that public media has the infrastructure and capacity to harness state-of-the-art technologies and cultivate large-scale alliances to make that vision a reality.

Public Media’s Strengths and History are at the Core of a Nationally Shared Goal
Ensuring that our nation’s children are well-educated and prepared for success in school and in life is a nonpartisan goal that is widely shared by leaders in the government, not-for-profit, and private sectors. It is why we consider ourselves and our member stations to be America’s largest classroom, and why we aim to reach every child, everywhere with proven, engaging opportunities for anytime, anywhere learning.

Just as the founders of our nation’s non-commercial public television service believed in its powerful educational potential, today’s public media leaders see the promise of video games to engage children and advance their learning. Over the last several years, CPB and PBS have served as the nexus for educational video game investment, collaboration, experimentation, iteration, and research by leading innovators in government, industry, and academia. Much of this work has been performed under a series of Ready to Learn grants that have brought together technologists, producers, researchers, and community partners for the benefit of young children aged 2-8.

The result of these past and current collaborations has been the creation of multi-platform content designed for all of America’s children and especially valuable to those living in poverty. These digital experiments – which span television, online, mobile, and interactive white board - are connected by narrative and aligned to math and literacy curricular frameworks. What’s more, they feature characters from public television shows that children know and love like Curious George, Cat in the Hat Knows A Lot About That, Super WHY, Dinosaur Train, Martha Speaks, Sid the Science Kid, and The Electric Company. At the local level, public television stations are working with a collaborative of educators in school and community-based settings, as well as with families and other caring adults to ensure that the educational impact of Ready To Learn’s math and literacy content is able to reach and influence kids in all facets of their life – increasing both the quality and amount of learning time – whether at home, at school or in the neighborhood.
Most importantly, research indicates that the games created under public media’s past and current Ready To Learn initiatives have been tremendously effective, significantly advancing and accelerating children’s learning and even narrowing the achievement gap between low-income and middle-income children.¹ Multi-stakeholder partnerships and especially the grass-roots partnerships that reach deep into low-income communities have been critical to its success.

Ready To Learn is a powerful example of the success of multi-stakeholder partnerships in creating effective game-based learning, but it is not the only one. The National STEM Video Game Challenge – which incentivizes students and educators to make their own video games - is the culmination and continuation of a two-year effort among the White House, the Department of Education’s Digital Promise Initiative, the Joan Ganz Cooney Center at Sesame Workshop, E-Line Media and other public/private partners and co-sponsors including Microsoft, the Entertainment Software Association, AMD Foundation, and the CPB-PBS KIDS Ready To Learn Initiative.

The Illuminate project, initiated by the Defense Advanced Research Projects Agency (DARPA) - an agency of the United States Department of Defense - is a multi-year project working in conjunction with many different institutions and organizations, such as Sesame Workshop and Carnegie Mellon’s Human Computer Interaction Institute. The end-product will be a multi-platform game for 1st-3rd graders that inspires interest and teaches basic concepts in the field of science.

**Targeted Successes Need Partners to Scale to their Potential**

While this positive track record provides a strong launch-pad for further action, there is still much to accomplish in order to bring these programs to scale. To maximize the full potential of these tools, additional games across more platforms must be produced and tested; best practices guides and curricular frameworks to direct developers in their creation of games that teach learners subjects like science and civics must continue to be developed; further ways for games to be integrated into the classroom and out-of-school learning environments must be designed; innovations that work must be scaled up; and more interactive technology equipment must be infused into formal and informal learning settings, along with opportunities for professional development resources for both in-school and out-of-school educators.

While public media has been successful at incubating multi-stakeholder partnerships to make progress in all of these areas, a gap exists in coordinating all of these innovations within and across sectors, and reporting out in a way that provides direction to the field and rallies the nation. Uncoordinated efforts often result in pockets of innovation that never reach scale. Without wise investments and thoughtful collaboration within and across sectors, learning games can fail to engage end-users, or end up as engaging

games that fall short of their learning goals. To this end, there is a need for leadership to coordinate the cross-sector design, development, implementation, and research of games for learning; synthesize this information within and across sectors; and report out to the nation to help educators, students, and families leverage the power of learning through games. Such coordination is consistent with the Game Changer report’s assertion that it will be through creative networks of partners with different expertise across multiple sectors that the potential of games for learning will be maximized and our nation’s education challenges met.

The newly-announced Games and Learning Publishing Council funded by the Bill and Melinda Gates Foundation and the John and James Knight Foundation is a grand start—and public media will be at the table playing a major role. The lessons learned by CPB and PBS in both content and delivery have significant relevance for the field of impact games.

**It Takes a Partnership**

Multi-stakeholder partnerships have been an important strategy that America has employed to tackle big challenges and meet our greatest needs as a nation. Whether brings electricity to every corner of the country in the early 20th century, redefining the war effort during World War II, catalyzing the space program during the 1950s and 60s, or fueling the development of the Internet and broadband communications over the last 20 years, America has met its biggest challenges when government, industry, foundations, nonprofits, and academia joined forces.

No single organization or sector has the capacity or resources to fully realize the potential of games for learning. However, public media has the mission, infrastructure, and creative will to foster and manage multi-stakeholder partnerships, as well as aggregate diverse resources, convene and mobilize high quality talent, and enlist the trust and commitment of families, educators and community partners on the ground. Through multi-stakeholder partnerships, we will work to make sure the gaming medium will not be a vast wasteland but an oasis of engaging content that catapults our nation back to a position of educational excellence and global competitiveness.