The New Literacy is Game Literacy

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President and Founder, World Wide Workshop Foundation Text and select slides of the paper presented at TEDGlobal, Oxford, UK: July 21, 2009

I've been thinking about two big questions: How do we prepare today's children for the complexities of the future? How do we make education more engaging and relevant?



Everyone understands that literacy is essential—that knowing how to read and write is the basic pathway to full participation in the world.

Today, I want to share with you a new idea: the idea that literacy is no longer just about reading and writing text. Text, the printed word, is becoming less and less relevant.



Instead, there is a new kind of literacy.

I call it game literacy—the ability to read and write videogames; to tinker the world.

Meet the members of the "Alliance of Super Tree Stumps."

That's what these four eighthgraders called their game team.

As an alliance, they have invented this character, "Super Toaster."

He is the main character in an interactive videogame about **fighting Global Warming.**

On their Team Wiki, they posted designs for Super Toaster and his sidekicks, the "Magical Trees," who transport the clean energy that powers Super Toaster.

This creative team also posted on their wiki how players can gain points or lives: by helping the Magical Trees cross the road, or by recycling trash, or by choosing the eco-friendly car, or by saving the penguins...

There were many other ideas and features to their game. What's important is that in gaining fluency in game design and computer programming, they also found *their* voice.

Working as a team, they gave free rein to their imaginations and feelings, and got connected to concerns about their world.

By the way, these young kids come from one of the poorest counties in the United States. Their experiences and new identities as game programmers was *their first lesson in the ABCs of the new literacy*.







Games are *their* medium. And the radical truth is that games are becoming the *world's* dominant medium. They are highly engaging to those who play them. This is why knowing how to read *and* write games—not just how to play them, but also how to make them—is the new literacy.

Worldwide video gaming is now bigger than the music industry, bigger than DVD sales, bigger by far than movies in a movie theater, bigger than television. By 2007, there were 217 million online gamers worldwide. They are more diverse than most of us realize: nearly as many women as men, nearly as many older people as teenagers, and the divides are closing fast.





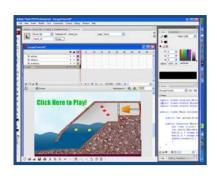
Gaming is truly becoming a new universal language, which is why I believe we must worry about equity. *Everyone* must become fluent in reading and writing games from a young age.

If our mother tongue is our first language, and English is our second language for global communication on the Net, then, a game-programming language must become our third! Like text literacy, game literacy has its own genres, structures, and complexities.

Mastering it can prepare today's generation for life, for any job, and for active citizenship.

It also begins in the same way as text literacy: by *learning the alphabet* of game literacy. Namely, by designing and coding and game programming.

The bottom line for me, and my personal passion as a social entrepreneur, is to **bring this game literacy into schools worldwide** just like reading and writing. This is an opportunity to transform schools, to bring back passion to education, and teach kids—*boys and girls everywhere*—how to read and write the language of *their* world.



If we do not, we run three terrible risks:



- 1. One risk is that we will fail to nurture the new literacy to its full potential as a medium—a potential for cultivating game greatness around the world as real as the greatness achieved by all kids and major writers of the printed word.
- **2.** The second risk is that we will fail the world's children. We will fail to enable them to reach their own full potential, both for economic stability and also for the chance to activate and develop their imaginations!
- **3.** And the third risk: if you know how to program games and simulations, you can become part of a wider conversation, you can engage with others in deep learning, you can explore complex systems, you can teach and explain things, you can form communities that bring people together, you can mobilize for change, you can influence and inspire! If you are game-illiterate, you cannot.

And something else: game-media formats are the new place for stories, literature, philosophy, politics and poetry. Yes, poetry. Games are today's form of self-expression and social change. They carry the narratives of our lives. They illustrate, advocate, argue and persuade.

Just imagine: if millions of kids from many cultures, races and genders will grow up learning "game writing," then, some will eventually rise to design, program and produce more original and interesting games, games of quality and purpose, better games and much more creative than the ones we play today.

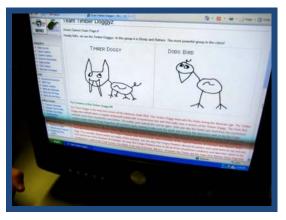
Games can explore even the most complex, the most difficult, biggest ideas. So a visionary game designer like Will Wright can turn principles of urban planning, life complexities, evolution and biology into what he calls "interactive toys" (in SimCity, The Sims, or Sphore). His game players find they are actually constructing and designing the concepts as they play. Imagine having the ability to write such games!

And look at this: former U.S. Supreme Court Justice Sandra Day O'Connor recently decided that the best way to teach her grandchildren, and their contemporaries, about the justice system, civics and citizenship is through games (in OurCourts.org).

This is because games are the language young people "speak" today, their method of exploration and self-expression, nothing less than the new frontier of learning, system thinking and human creativity. In fact, learning theorists (myself included), brain scientists and cognitive psychologists and educators have known this for years: games put brains on fire. *Good fire!*

And here is the good news: *Kids take to game literacy like ducks to water*. Let me offer three reasons why:

- **1.** Games are complex systems, which makes them much more engaging and fun to figure out or create than simple things.
- **2.** Making games is also a chance to represent information, to imagine, doodle and draw—and do you know a kid who doesn't like to doodle and draw?
- **3.** Making games responds to the way the human brains like to work: in social communities. Kids can form these communities virtually, over the Internet, where they are immune to time zones and physical and economical constraints.







I know this because it is the work we do at the Worldwide Workshop Foundation (www.WorldWideWorkshop.org) where our mission is to inspire and educate the next generation to make quality games, to get excited about learning and care about global issues, and change the world for the better with their games.



In the past couple of years, we have launched **GLOBALORIA** on the web (<u>www.Globaloria.org</u>), a platform with six social networks that teach kids how to designs games for social change.

We demonstrate creative ways for how social networks can meet education with social responsibility.

What you see here are the blueprints of our pilot work in the United States, in West Virginia, in New Orleans, in Washington DC, and in Texas: and with some of our partners and funders we've also experimented in other places around the world, in Malaysia, in Nigeria, in Trinidad, in Saudi Arabia, or Israel.



Globaloria at a Middle School in West Virginia (2008-2009)



Globaloria with Arab and Jewish Youth in Israel (Nov. 2006)

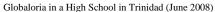


Globaloria at a Summer Camp in New Orleans (July, 2008)



Globaloria Educators in a Charter School in Texas (July, 2009)

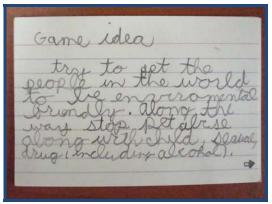


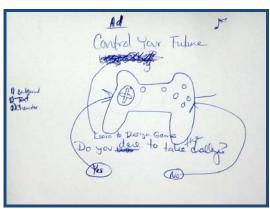




Globaloria team work in Avondale West Virginia (2008-09)

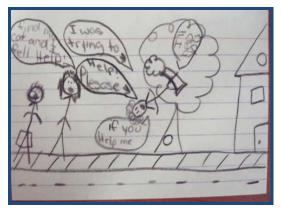
Our Globaloria students and educators everywhere are taking their first baby steps in imagining their games, brainstorming their game ideas, designing prototypes for their games, working in teams, and programming games about such complex issues as health, the environment, democracy and policy, or peace.

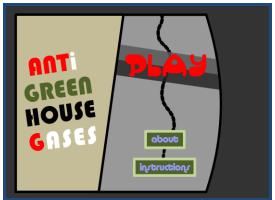












I put it to you that their game literacy is our obligation.



It is our responsibility to ensure that what many of us may still think of as a form of silly entertainment, fulfils its potential as a powerful medium for *collaborative social change*.

It is our job to make certain that the new literacy—game media literacy—is accessible and comprehensible to all children everywhere from a young age, like print media literacy. Think about it like reading books and writing texts: reading helps writing and vice versa.

The idea of a global social network for learning the "Globaloria way" is big; it's rooted in past theory and research, and it brings hope because it can travel much further than our eyes can see today. But one specific idea that's worth spreading here at TED, is that knowing game literacy, both playing and *making* games, is the gateway to participation in the world our children live in.

We owe it to them to make sure they are equipped to open the door: ready to imagine and create, think and tinker, work together and spread their games through the global networks. They must know how to engage themselves and others on major issues, participate to realize their own potential, and change schools and our world for the better.



Let's take TED to school! Thank you

GLOBALORÍA



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