



Wondering what the researchers are saying about impact of Minecraft: Education Edition in the classroom? Attached you'll find a small sample of ongoing research into how Minecraft helps students play, craft, and learn. Please reach out to our team through [education.minecraft.net](https://education.minecraft.net) if you're interested in learning more about our work or want to collaborate on future research endeavors.



## **Level Up Learning: A National Survey on Teaching with Digital Games**

Joan Ganz Cooney Center

Takeuchi, L. M., & Vaala, S. (2014). Level up learning: A national survey on teaching with digital games. New York: The Joan Ganz Cooney Center at Sesame Workshop.

### **Digital games have landed in K-8 classrooms.**

55% of K-8 teachers report using digital games for instruction at least once weekly.

### **Games effective in improvement for mathematics and computational thinking.**

Nearly three quarters (71%) of digital game-using teachers report that games have been effective in improving their students' mathematics learning.

### **Few teachers are using immersive learning games.**

Immersive learning games are those that lend themselves to deep exploration and participation in the types of activities that set digital games apart from more didactic forms of instruction.



### **Learning mathematics through Minecraft**

Beth Bos, Lucy Wilder, Marcelina Cook and Ryan O'Donnell

Bos, B., Wilder, L., Cook, M., & O'Donnell, R. (2014, August 1). Learning mathematics through Minecraft. Retrieved September 28, 2014, from

**Students are naturally inquisitive and explore without fear of failure when using technology.**

All these traits help them investigate mathematics within game-based technology.

Many students are already familiar with and playing Minecraft at home, engaging them in critical thinking via Minecraft increases their curiosity and confidence for mathematics.

**Students gain deeper understanding of concepts like area and perimeter by applying them to building structures in Minecraft.**

After building their structures, they compared and discussed the similarities and differences among one another's configurations. Questions were raised about the different choices of shapes for the buildings (narrow and thin or almost square). The variety of possible dimensions inspired a rich discussion.

**By helping students to ask deeper questions and solve more complex problems, teachers can help strengthen their critical thinking skills.**

Students' only limitations may be what questions to ask and which problems to solve, and that is where the teacher contributes meaningful scenarios and pertinent questions reflective of the curriculum.



## **Minecraft as a Powerful Literacy Prompt in the Secondary English Classroom**

Nerissa Marcon

Marcon, N. (2013). Minecraft as a Powerful Literacy Prompt in the Secondary English Classroom. *Australian Curriculum English Lessons & Resources*, 49(2), 49th ser., 35-36. Retrieved January 4, 2017.

**Minecraft allows teachers to bring "narratology" approach to the classroom.**

Digital game play can be interpreted as a narrative and motivation for deeper literacy practices, which can be an entry point for many students.

**Digital games provide students opportunities to learn via new literacies.**

Digital and online games as social tools for communication in new and ever-changing contexts are integral to new literacies.

**Minecraft can be a starting place for students as they begin their journey as writers.**

Students could effectively design their virtual landscapes using Minecraft software and then write about it creatively, for example for as a basis for their short story narrative.



## **Collaborative Onscreen and Offscreen Play: Examining Meaning-Making Complexities**

Lisa Kervin, Irina Verenikina, Maria Clara Rivera

Digital Culture & Education, December 2015, Vol. 7

### **Blending physical role playing with digital play.**

When we combine traditional make-believe and digital play, these complements one another to provide a rich texture for making meaning.

### **Minecraft is a collaborative play experience for students.**

Children embedded elements of simultaneous play in onscreen and offscreen contexts and demonstrated high levels of cooperation and collaboration as they fluidly moved between contexts during their play.

### **Peer collaboration and mentoring is essential in digital immersive games.**

There is reciprocity in sharing peer relations, manipulating artifacts and being an object other to oneself and increasingly acknowledging other perspectives. Both the physical and digital play objects provided valuable opportunities for meaning-making for each participant.