

Learning Games: Testing the Three Genres

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				Sequence of chapters	Corresponding games	Games in Ch. 5
		Technology	Pedagogy			
n by	Instructor	LMS + Autograders	Thorndike	Ch 1 MOOCs	Math Blaster (Luminosity?)	Zoombinis
				Ch 2 –		Math Blaster
	Algorithm	IRT + Autograders		Intelligent		Vanished
				Tutors	Duolingo	
Driven						Duolingo
۵						
	Peer	Web + Aggregators	Dewey	Ch 3 cMOOCs	Vanished (Minecraft?)	Luminosity
						Minecraft

Links to Explore:

- https://playclassic.games/games/educational-dosgames-online/play-math-blaster-plus-online/play/
- https://playclassic.games/games/educational-windows-games-online/logical-journey-of-the-zoombinis/play/
- https://education.minecraft.net/
- duolingo.com

	Who controls/drives the pace and pathway of learning?	What are the core technologies?	What pedagogies inspired the design?	What can I predict will happen in my educational system given as a consequence of this design?
Math Blaster	Instructor	Auto-grader	Thorndike	just worksheet problems, not reconfiguring learning
Duolingo	Algorithm	IRT/auto-grader	Thorndike (or maybe not!)	Does gamification address challenges of self-paced learning? What are upper bounds of language learning outside a foreign country?
Vanished	Peer	Open web, aggregators	Dewey	This is cool, doesn't fit into schools
Zoombinis	Instructor	Auto-grader	Dewey	Cost per combinatorics lesson?
Minecraft	Peer	Open web, aggregators 4	Dewey	Doesn't fit well with how time is organized,

Transfer—the application of learning from one domain to another—is much less likely to happen than teachers or learners hope

(Alas, for historians reading on the internet, for softball players reading soccer passages, or computer programmers writing essays...)

Near transfer is more likely than far transfer, and the bounds of "near" are much smaller than we would hope

Old Outline

New Outline

Learning games and learning at scale

- intro to learning games
- Intro to using learning games as a worked example

Zoombinis

Walking through how to classify games; hybridity of genres can be interesting

Chocolate-Covered Broccoli + Playfulness

- Instructor-led Math Blaster vs. Peer-led Vanished
- Discussion on gamification vs. playful learning dichotomy

Do Games Support Learning?

Brain Training Apps

- · Duolingo, algorithm-led
 - Lumosity + transfer

Learning from Non-Education Games

- Connected learning networks
- Transfer + can students learn from Minecraft?

Learning games and learning at scale

- intro to learning games
- intro to what people hope learning games will do
 - Intro to transfer
 - Lumosity
 - Intro to transfer
- Using learning games as a worked example

Instructor-guided: Math Blaster

Discussion on gamification vs. playful learning dichotomy

Algorithm-guided: Duolingo

Peer-guided: Vanished and Minecraft

Hybrid Genres: The Logical Journey of the Zoombinis

Do Games Support Learning?

Conclusion

Conclusion

Using the L@S Genres

Who controls the pace and pathway of learning?

What are the core technologies?

What pedagogies inspired the design?

Math Blaster (Lumosity?)

Duolingo

Vanished (Minecraft?)

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CMS.595 Learning, Media, and Technology Spring 2024

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