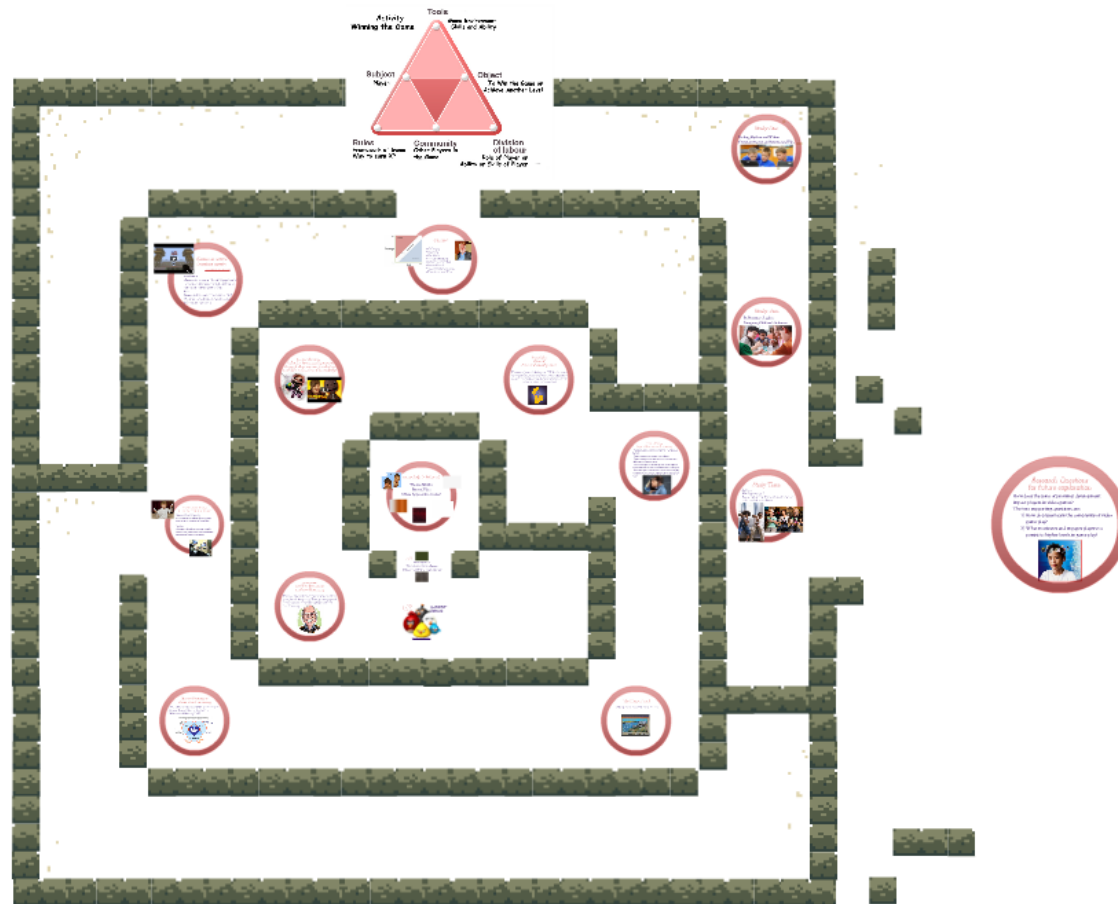


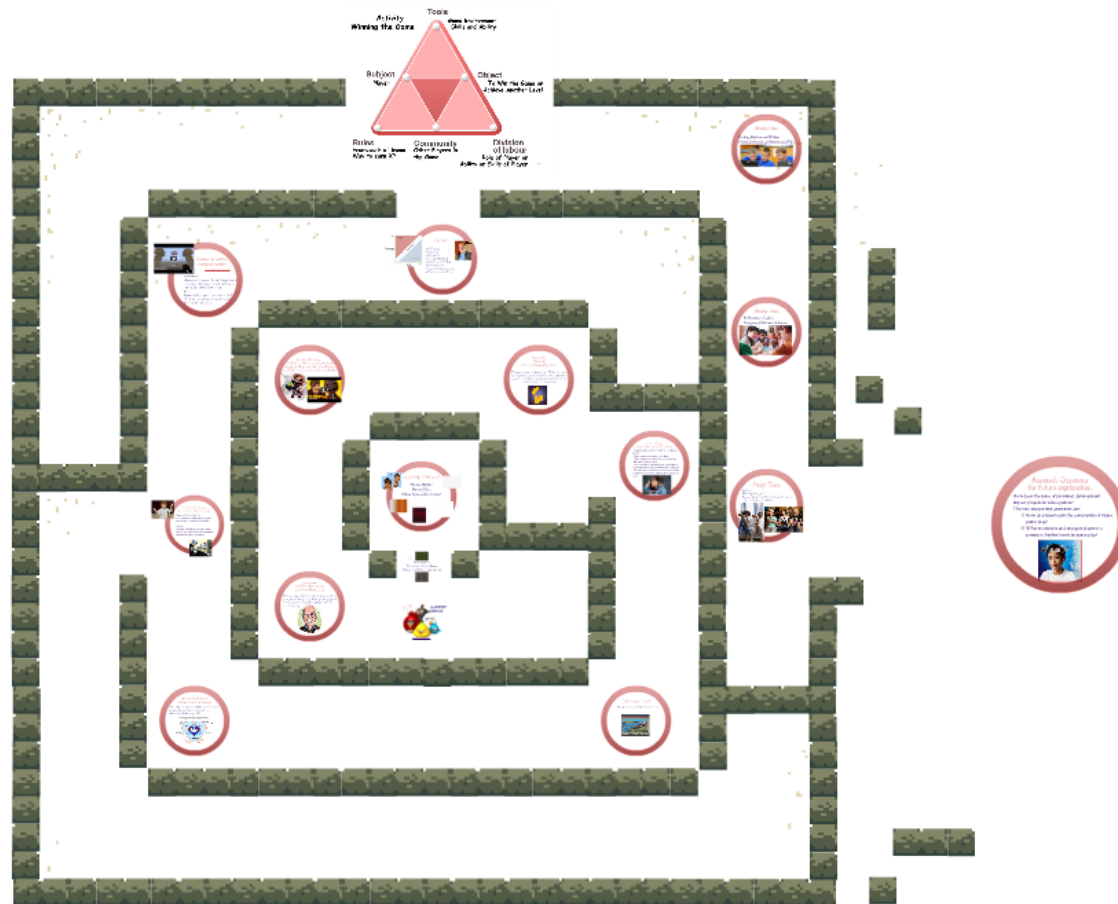
Vygotsky and Digital Gaming

An Introduction and Discussion to further Research



Vygotsky and Digital Gaming

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Games help to define us!



Thomas Malaby
Beyond Play:
A New Approach to Games"



*Games
Challenge Us*



Kurt Squire in "Open-Ended Video Games: A Model for Developing Learning"



*Symbols as
a form of
literacy.*

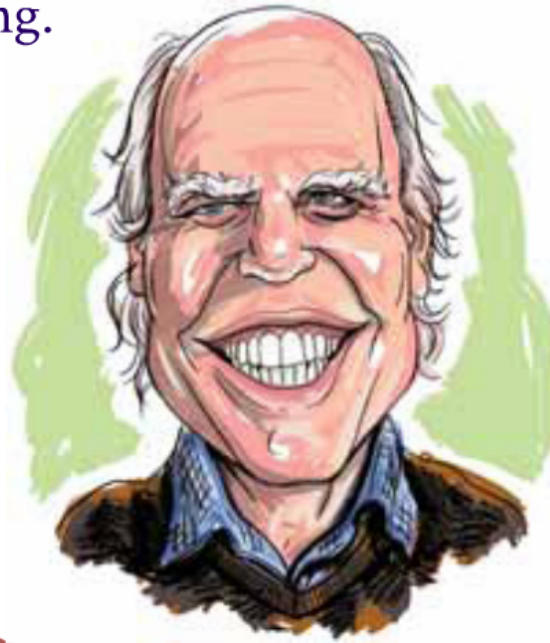
Gee - “technology that allows
people to decode meaning
and produce meaning
by the use of symbols”



[\(http://chrome.angrybirds.com/\)](http://chrome.angrybirds.com/)

*James Gee -
Good Video Games
and Good Learning*

There is a new field of learning emerging around the principles of video gaming. These games engage and motivate players into producing deeper and more fruitful learning.



*Lisa Galarneau -
Authentic Learning Experiences
Through Play: Games, Simulations
and the Construction of Knowledge.*



Vygotsky Zone of Proximal Development

The zone of proximal development (ZPD) is that area of learning where a player can problem solve independently to a point, but needs some guidance or collaboration from others to make it to the next level



Marc Prensky
Digital Game-based Learning

- Provide enough content so players will not become bored
- Design the game for players, not students
- Design the game so players want to complete their objectives and keep playing
- Assist the players in perceiving their knowledge has grown, because of their time investment in the game
- Help the players increase their chance of winning by the experience and knowledge gained through game play



The Oregon Trail

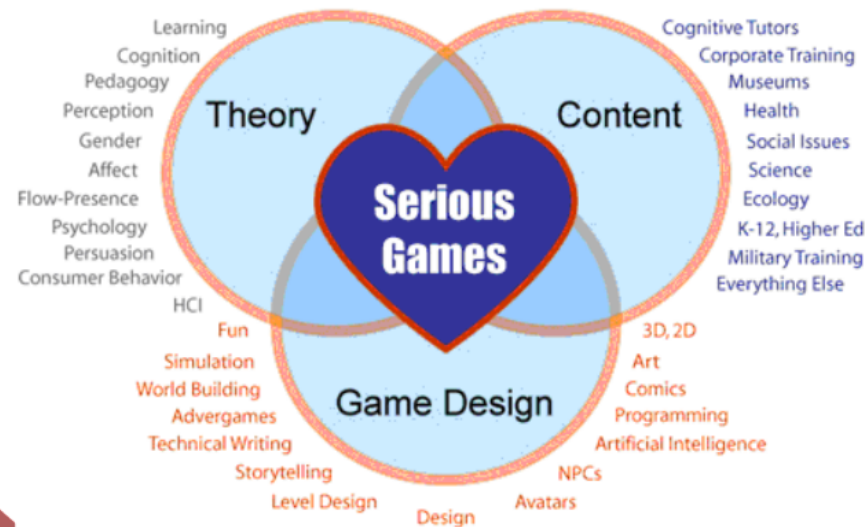
Older game that has stood the test of time.



Serious Gaming or Game Based Learning

Aroutis Foster - Games and Motivation to Learn
Science: Personal Identity, Applicability,
Relevance and Meaningfulness.

The Heart of Serious Game Design





Active participants in a new learning culture

Greeno, Collins, & Resnick -

It is important for students become active participants in constructing knowledge.

Prensky -

Computer and video games have created a new learning culture that corresponds better with students' habits and interests





Games as active learning agents

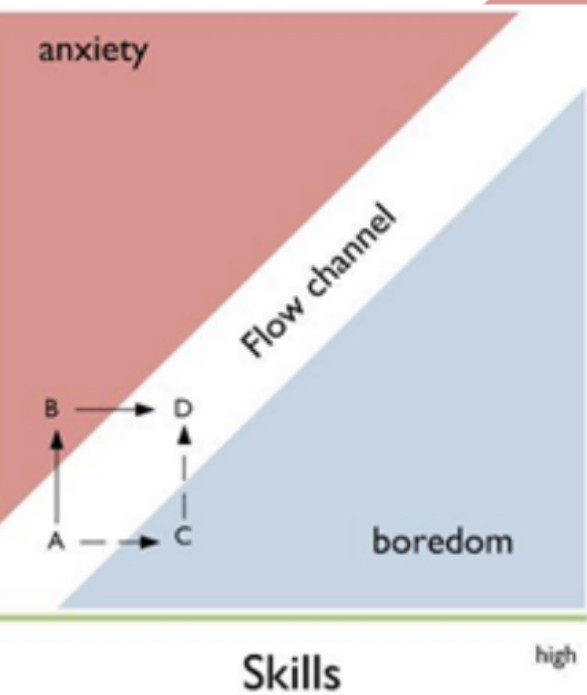
<https://minecraft.net/>

Scardamalia -

- Games can become active learning agents and the focus of learning shifts from covering the curriculum to working with ideas.

Kiili -

Games provide possibilities for reflectively exploring phenomena, testing hypotheses and constructing objects.



"FLOW"

- Challenging
- Absorbing
- Clear Goals
- Immediate Feedback
- Concentration on Task
- Sense of Control
- Loss of Self-Consciousness
- Transformation of Time





Study One

By Ang, Zaphiris and Wilson
Computer Games and Sociocutural Play



Study Two

By Rosemary Luckin

Designing Children's Software



Study Three

Garzotto

Was Vygotsky right?

Evaluating Learning Effects of Social Interaction
in Children's Internet Games



Research Questions for future exploration

How does the zone of proximal development impact players in video games?

The two supporting questions are:

- 1) How do player learn the complexity of video game play?
- 2) What motivates and engages players to persist to higher levels in game play?



