

Designing Games for all Learners

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Everybody Plays

Play, observable throughout the animal kingdom,
is the fundamental way we learn.

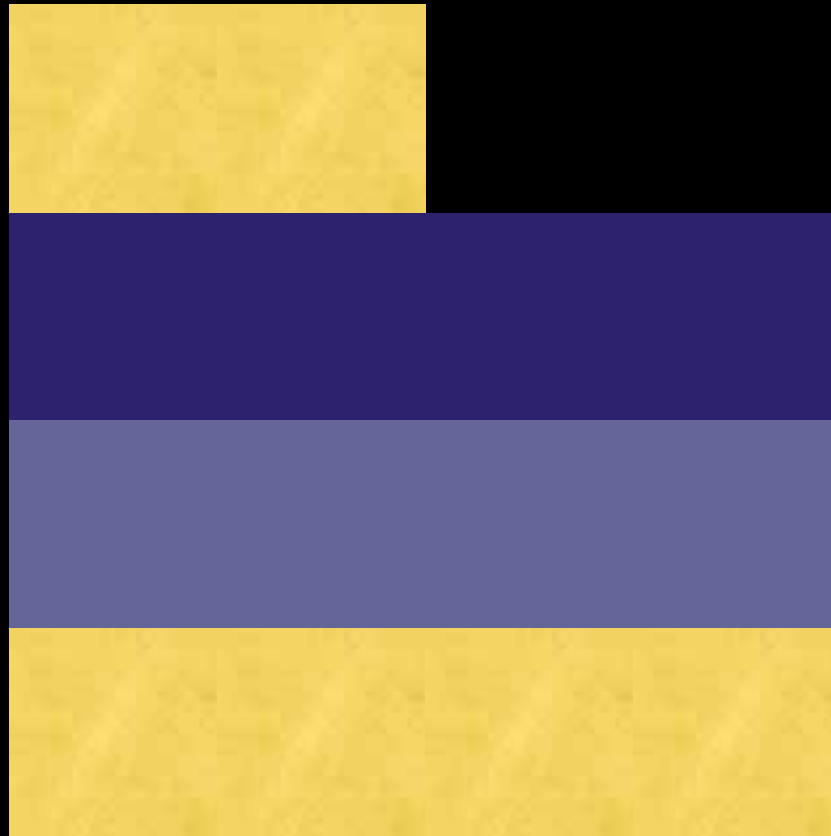
"Now in myth and ritual the great instinctive forces of civilized life have their origin: law and order, commerce and profit, craft and art, poetry, wisdom and science. All are rooted in the primeval soil of play."

—Johann Huizinga
Homo Ludens, 1938

An example with rods and clamps

from *The Children's Machine*,
Seymour Papert, 1993

A personal example with blocks.



Through the informal activity of play, we scaffold the concepts and processes that we will engage with formally throughout life.

Play has no agenda

The player's motivations are entirely intrinsic and personal.

The Four Freedoms of Play

- Freedom to Experiment
- Freedom to Fail
- Freedom of Identity
- Freedom of Effort

The player's motivations are entirely intrinsic and personal.

How do we channel play into learning activities while still allowing for play's open-ended nature?

GAMES



GAMES

In games we agree to arbitrary rules in pursuit of mastery, but only if we can continue to be playful.

Without playfulness a game is just going through the motions.



Let's Play

Keep in Mind:

Structure

Activity

Narrative

Game Structure

- Multiple passage through challenge (tokens)
- Partial reward for partial success— clear incentives for more success
- Emerging ideas
- No brick walls
- Not just one way to win
- No time pressure - enables collaboration
- Conversation

Game Activity

- Not about memorizing solutions - about learning strategies, processes, habits of mind
- Players understand that “wrong” answers are part of getting the right answer
- Learning to think like a scientist, mathematician, engineer, artist
- Players build a scaffolding for future learning
- Engaging with content in a context
- Activities that are tactile, offer sensory satisfaction

Game Narrative

- A game world that allows players to explore their identity
- Not patronizing or flattering
- Non-gendered
- A game world that embodies the subject matter.

Thank You

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