SNEAK TEACHING BRIDGE

a tool for learning bridge

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- PhD research fellow
- University of Bergen, Norway
- Research on: design of educational environments & engagement
- Project: Sneak Teaching Bridge

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SNEAK TEACHING?
LEARNING & GAMES
STEALTH LEARNING

“... non traditional tools, such as games, to encourage students to have fun and learn”

“... students think they are merely playing, but they are simultaneously learning”

(Sharp 2012)
LEARNING GAMES
(games, specifically developed for education)

to create fun and motivating learning situations

or . . . .
how can one design a learning game that teaches without the player noticing?
sneak teaching!
GAME DESIGN

Flow

“state in which people are so involved in an activity that nothing else seems to matter”

(Csikszentmihalyi 1990)

challenges vs ability to solve
GAME DESIGN

Flow

“state in which people are so involved in an activity that nothing else seems to matter”

(Csikszentmihalyi 1990)

DIDACTIC DESIGN

Zone of Proximal Development (ZPD)

accomplishment of the learner by himself vs with help of a tutor

(Vygotsky 1978)

challenges vs ability to solve
Addressing a player/student’s ZPD in a learning game contributes to the game flow.
instructional design for learning games
A Sneak Teaching Game is a type of Learning Game where the learning is hidden within the game mechanics, so that players perceive the game as an Entertainment Game.
SNEAK TEACHING GAME DESIGN

- Learning game
  - game mechanics
  - pedagogical content
  - embedded

- Sneak teaching game
SNEAK TEACHING GAME DESIGN

3D

1. Pedagogical dimension
2. Game dimension
3. Sneak teaching dimension
how to present pedagogical content as a game?
PEDAGOGICAL CONTENT AS A GAME

structuring of the learning domain
can contribute to scaffolding

&

embodying learning elements by game elements
sneak teaching Bridge
BRIDGE

• problem to attract new players
• difficult to learn
• high threshold to start
DESIGNING BRITZ!

1. learning domain design
2. paper game environment
3. digital game design
LEARNING DOMAIN

Bridge

- Card play
- Declarers play
- Defence
- Establish tricks
- Promoting
- Developing Long Suits
- Finessing
- Trumping
- Cashing winners
- Endplaying
- A combination of these

Bidding

- Opening
- Responses
- Overcalls
- Etc.
**MINI PUZZLES**

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<th>♠Q</th>
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↑ Computer (opponent) controlled
Player’s cards to control →

<p>| ♠A | ♠Q | ♠9 | ♠6 |</p>
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Player’s cards to control →

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participant

game space

game elements (currently out of play)

supervisor (opponent)

folder containing the levels
see sneakteachingbridge.com for the prototype
(made for viewing with iPad)
POTENTIAL & PURPOSE OF BRITZ

• all ages, including seniors
• extra training along side bridge classes
• convince non bridge playing friends
• puzzle game to stimulate the brain
FURTHER RESEARCH

- Which learning domains allow for Sneak Teaching
- Compare learning outcomes of Sneak Teaching Games to other teaching methods
- Further Britz!