JagWarz Junior: Cyber Security for Young Adolescents
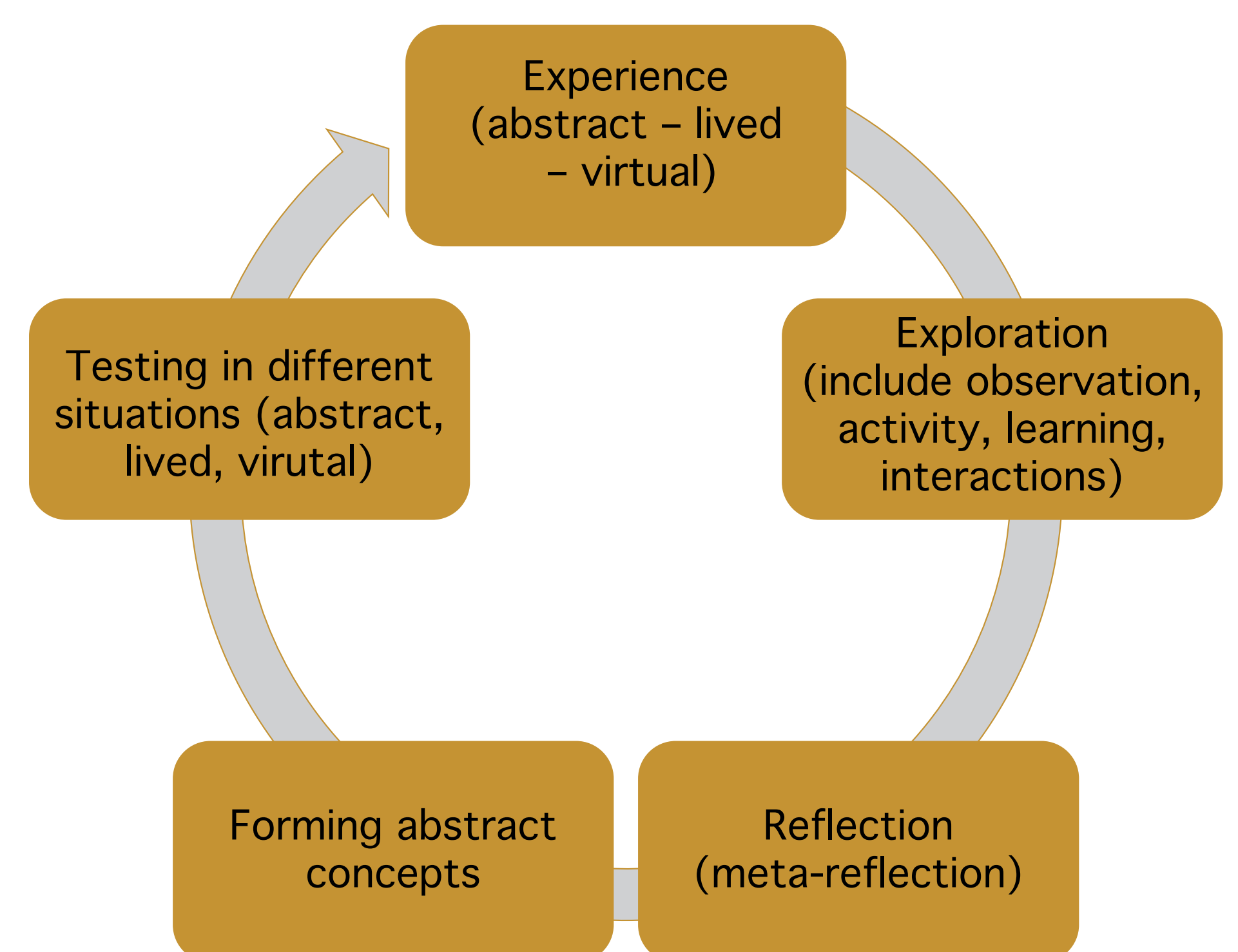
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Abstract

Currently there are few methodologies for introducing cyber security to young adolescents. This area of research will examine the importance of teaching cyber security at an early age as well as the significance of introducing cyber security through the use of digital game based learning. Within this study, cyber security will be taught to a sample of young adolescents through the use of a capture the flag style game, JagWaRz Junior. The effectiveness of JagWaRz Junior will be quantitatively measured through a pretest and posttest presented to the participants. Overall, this game will encompass ways to handle many of the risks that come with Internet usage at an early age. These risks include but are not limited to cyber bullying, pornography, online predators, personal privacy, and password protection. The results of this study will contribute to our understanding of the effectiveness of digital game based pedagogic learning.

Future Work

- Will be known as Internet Security Training (InSecT).
- Implement interactive games within challenges.
- Allow for customization of characters as a reward.
- Market towards security conferences.
- Pretest and posttest will measure the effectiveness of digital game based learning.

Methods

- Examine experiential learning models.
- Develop a capture the flag style game using PHP.
- Write character profiles to create storylines for the challenges.
- A sample group of children ranging from ages 10-13 will be used.
- The effectiveness of JagWaRz Junior will be quantitatively measured through a pretest and posttest given to the participants.

Experience (abstract – lived – virtual)

Exploration (include observation, activity, learning, interactions)

Reflection (meta-reflection)

Forming abstract concepts

Testing in different situations (abstract, lived, virutal)

Freitas, S. D., & Neumann, T. (2009). "The use of 'exploratory earning' for supporting immersive learning in virtual environments." Computers & Education,52(2), 343-352.

Jeopardy-style CTF

- Cyber Bullying
- Privacy
- Security
- Inappropriate Content

Unavailable   Available   Incorrect   Answered

GAME SCORE

1) cjfarnsl 2300
2) Sparfacus 1600
3) astrakis 1300

GAME PROGRESS

rushvyas just submitted an incorrect answer for 200 points
rushvyas just scored 100 points
rushvyas just scored 100 points

GLOBAL PROGRESS

rushvyas just submitted an incorrect answer for 200 points
rushvyas just submitted an incorrect answer for 200 points
rushvyas just submitted an incorrect answer for 100 points

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