

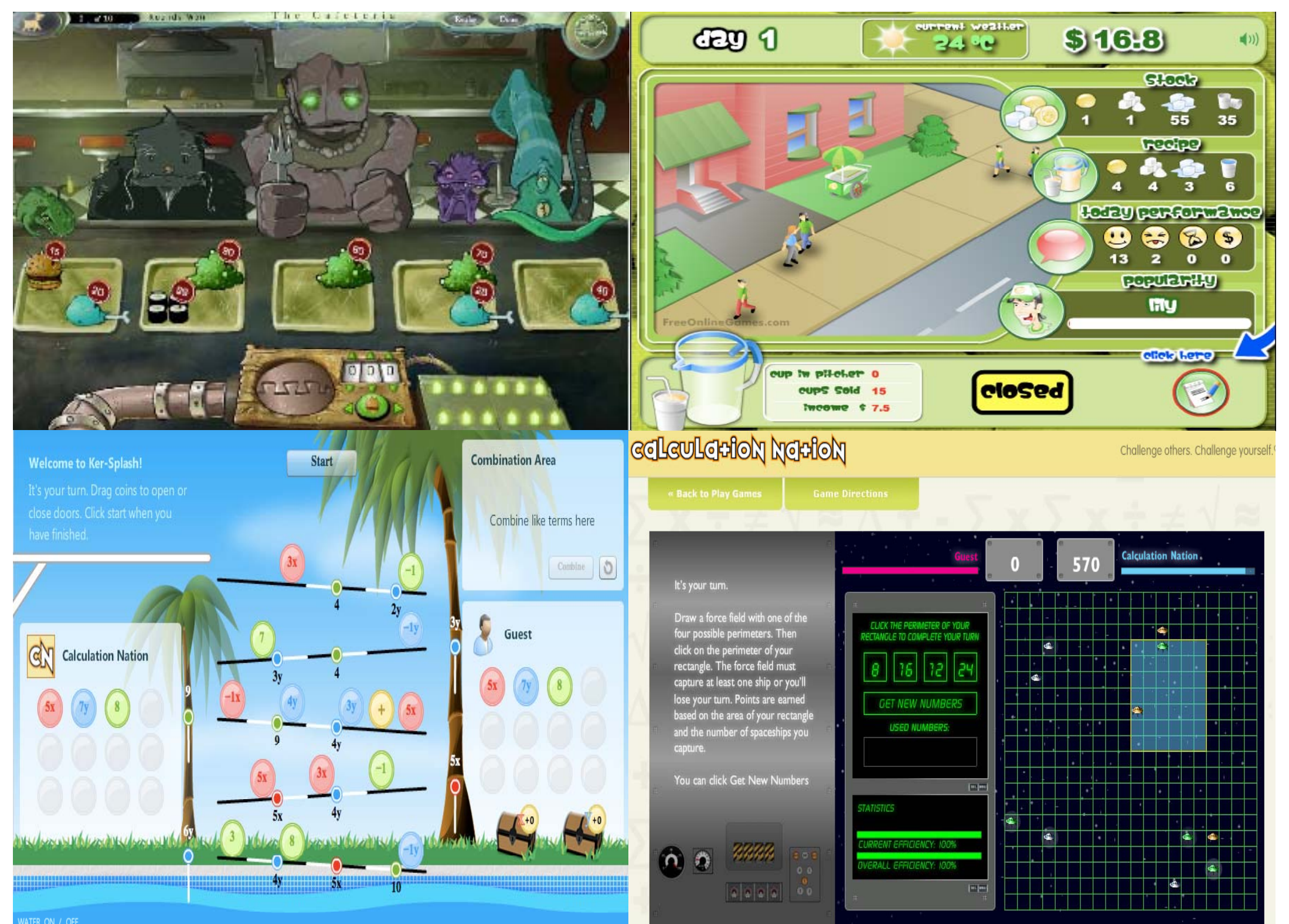
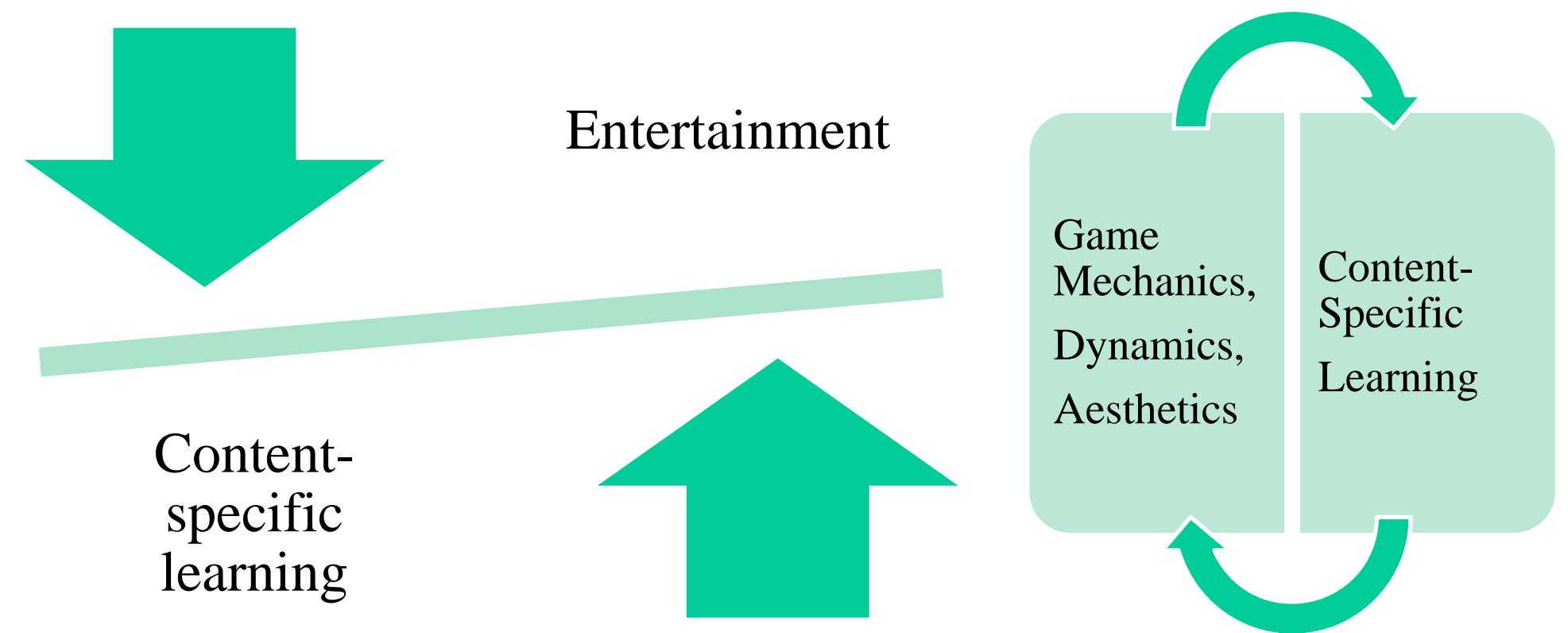
Examining Interdisciplinary, User-Centered Educational Game Design

- **Research question:** What are the cumulative findings on the educational game design and development?

- **Method:** (1) a systematic review of the multidisciplinary literature on game design and game-based learning, (2) an artifact analysis of representative educational game projects conducted by credible organizations, and (3) interviewing of game designers and developers.

- **Findings:** (1) A grounded model for designing content-specific, educational games (see the figure on the right side), (2) Distinctive design features that support game-based learning:
 - An integration of simplicity and diversity
 - Balance between content-specific and content-generic play
 - Cognitive challenges in adaptive level and pace

- Game play, mediated by the features of the games used, can promote content-specific knowledge and skills development.



Future project 1:

Design-based research on virtual-reality-based social gaming for autistic children

Future project 2:

The design and examination of an architecture game for mathematics teaching and learning