

# Games as Catalysts for Social Learning

By Meagan Rothschild

With the public release of *Cosmos Chaos!*<sup>™</sup>, the video game outcome of PREL's STAR Schools JUMP Into Reading for Meaning research grant, conversations around the related study's findings are sure to increase. Evaluated by Berkeley Policy Associates (BPA), *Cosmos Chaos!*<sup>™</sup> was found to produce statistically significant gains in the game's educational objectives. This means that on average children that played the game learned more vocabulary words than children who didn't. Further analysis of the data also indicated that bilingual children benefited more from the game than monolingual kids and that there was a positive correlation between playing and learning.

As I've participated in conferences over the last year sharing the exciting news of the game's confirmed positive influence on students' learning, I've often been asked how I know that the game alone causes improvement. My first answer has to do with the experimental evaluation design and the use of control groups. But my more important response is to agree with the cautious questioning. I do not feel comfortable saying that the game alone caused the change; and I'm quite comfortable with that.

What I *can* say with fair certainty is that while the game does not necessarily represent a singular learning solution as an isolated gem, it did become the catalyst for the learning to take place. What takes place *within* the game became important in the contexts of what took place *outside* the game. The "problem" with evaluating games with traditional evaluation practices (isolating as many variables as possible) is that the social dynamics naturally emerging as a product of group play, even in an individual player game, are not given space center stage.

The final evaluation report by BPA (2009) states that at many sites, game play became a social activity. Students discussed the game, traded strategies, and shared information about levels, battles completed, and game characters. Given flexibility in seating, many students sat together, often grouping by ability level. "Expert" players were sought by peers and encouraged to share information by site supervisors. In addition to peer-to-peer relationships, some site supervisors "interacted with students around the text by sounding out difficult words, reviewing reading strategies, providing synonyms, or using an unfamiliar word in a sentence."

The game creates a space for the content to be interacted with, both within and outside the game's content and mechanics. Game scholar Jim Gee (2007) discusses the difference between "communities" and "spaces," with the latter providing more flexibility for understanding behaviors and motivations within it. *Cosmos Chaos!*<sup>™</sup>, as used within an after school program, created a space in which there was a content organization (i.e., what the space was about), and interactional organization (i.e., how people organized thoughts, behaviors, and social interactions in response to the content).

So what can we glean from the findings of the study and our knowledge about the social dynamics of learning?



Games can be catalysts for social connections to be made. Relational spaces that build around content may include both peer-to-peer and student-to-adult mentoring relationships. Games provide avenues for distributed expertise. With regard to learning the content, meaning emerges from the play process, not simply via the texts themselves (Salen & Zimmerman, 2004).

To use an educational analogy (Greeno, 1991), the ways in which learning took place through *Cosmos Chaos!*<sup>™</sup> had less to do with the "rutted path" (the grooves in the road that guided chariot wheels) and more to do with "learning the landscape," which members learned their way around and identified resources available and how to use them in conducting activities.

Games afford spaces through which players navigate within systems, interact with content, and can participate in interpersonal relationships around content. Whether or not digital, educational providers can leverage the opportunities available with games by creating spaces for students to play, relate, explore, and pursue goals.



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