

The Role of Board/Card Games in Building School Communities

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Set Enterprises

Nomenclature

- ▶ *School Communities – defined as intellectual **and** social communities.*
 - ▶ *Student of all ability levels, teachers and parents*
- ▶ *Intellectual games*
 - ▶ *non-physical/thinking games*

Abstract

I'm going to argue that certain types of games should be
integrated into
the curriculum from K-12 in our efforts to
“Reach for Balance”
in building social and intellectual
communities in our schools.

Introduction

- ▶ *Games are usually viewed as an effective way to engage children and establish rapport.*
- ▶ *The **fun** of playing challenging games can reduce the pressures that lead to conflict, while building social relationships.*
- ▶ *I don't need to emphasize these aspects. They have been used "forever", and have resulted in games being relegated to a secondary role in the teaching process.*

Introduction continued

- ▶ *Games have not been closely analyzed to delineate the “mental activities” playing them generates which can contribute to the educational process – with the notable exception of Chess.*
- ▶ *We are going to play and analyze two games to show how they can embody important educational aspects.*
- ▶ *We hope to leave you with the idea that certain games can be used as tools that help implement the core curriculum for the widest possible number of students.*

Introduction continued

▲ *TRACK I*

- ▲ *However, carefully chosen games also foster an environment that allows students, teachers and parents to exhibit diverse intelligences, backgrounds and/or cultures in a setting that leads to appreciation each other's gifts.*

▲ *TRACK II*

- ▲ *Intellectual games also foster thinking skills. They can help in math, science, reading, etc.*

Why look to games?

- ▶ *Games are a natural expression of a child's energy. Game play is a pleasant, joyful activity that does not have to be imposed on the players, i.e., games are fun.*
- ▶ *Observing children playing, one sees excitement, involvement, concentration, consistency, obedience to the rules and norms of the game, interpersonal interaction, and group cohesiveness.*
- ▶ *What if students can deepen their understanding of core curriculum skills -- as well as gain social skills -- with this level of enthusiasm?*

Why do games have great attraction?

- ★ *What is unique in game play as a learning method is **its internal motivational system**, the joy and the pleasure of playing a game that motivates the child to continue playing. This internal motivation differentiates play, to a certain extent, from work and real-life situations.*

Three categories of games

▶ *Games of Physical Skill*

▶ *The outcome is determined largely by a player's physical and motor activity.*

▶ *Intellectual Games*

▶ *The outcome is determined largely by **rational choices** among possible courses of action. For example: checkers, chess.*

▶ *Games of Chance*

▶ *The outcome is determined by guesses or by uncontrolled artifact (spinning wheels, etc).*

Intellectual Games as tools for Reaching for Balance in the classroom

- ▶ *To properly enhance our objectives of reaching for balance utilizing games, they must be integrated into curricula professionally.*
 - ▶ *They must be analyzed to:*
 - ▶ *Address the general need to develop “intellectual acuity”*
 - ▶ *Address needs for reading proficiency and fluency*
 - ▶ *Math, science, social studies needs*
- ▶ *Games add teaching dimensions that don't take sides in pedagogical teaching wars.*
- ▶ *Timeless tools that are inexpensive.*

Track I: Games can bring out a child's strengths as embodied in their different intelligences

- ▶ *Howard Gardner's exposition of multiple intelligences has helped us to realize that teachers can find aspects of a syllabus that each student is more naturally good at.*
- ▶ *The intelligences include: linguistic, musical, logical-mathematical, spatial, bodily-kinesthetic and personal intelligences – and others.*

Tom and Andy Story

- ▶ *To understand different intelligences that games can bring out, let me briefly explain the game they played - the SET Game.*
- ▶ *This happened in a general life setting, observed over 17 years.*
- ▶ *Andy was reading in kindergarten, Tom is dyslexic. You can guess the story from here?*

Tom and Andy Story (con't)

- ▶ *As kids growing up on the block Tom and Andy only played sports together.*
- ▶ *Then one day Tom (about 10) comes into our house, and he says “I beat Andy in SET”!*
- ▶ *What kind of intellectual game could a dyslexic kid outperform an “exceptionally bright” kid? Lets see.*

Lets Play the SET Game

- ▶ *Please inspect the cards. They have 3 attributes – color, shape and number. You will find 3 shapes, three colors and 1,2 or 3 shapes on the cards.*
- ▶ *The Rule: All playing at the same time, players must find 3 cards that are alike or completely different in each of their attributes.*
- ▶ *Looking at the screen I will guide you through the process.*

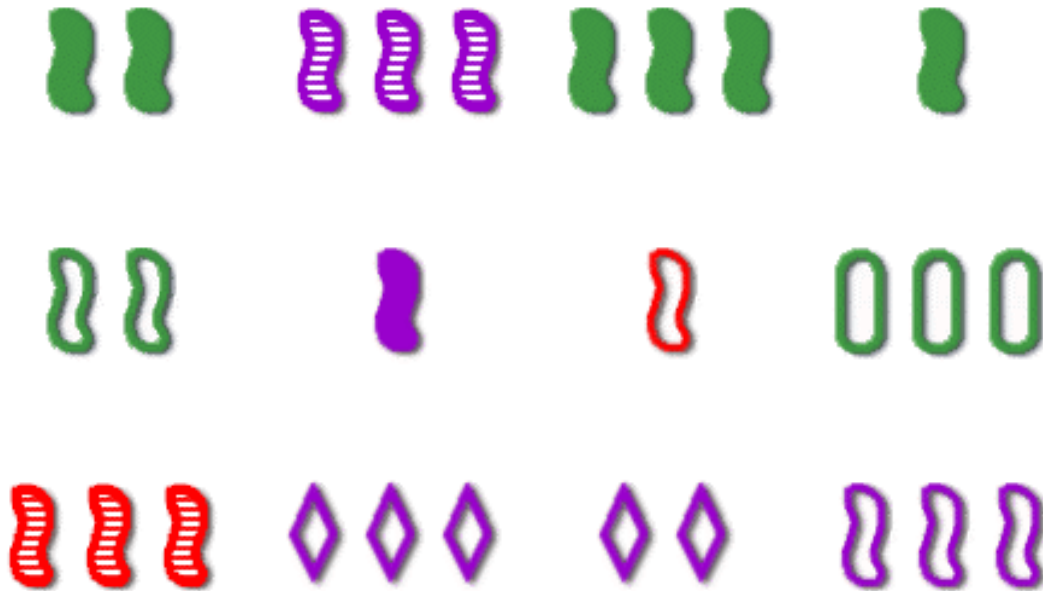
The SET Game

★ *Nine cards*

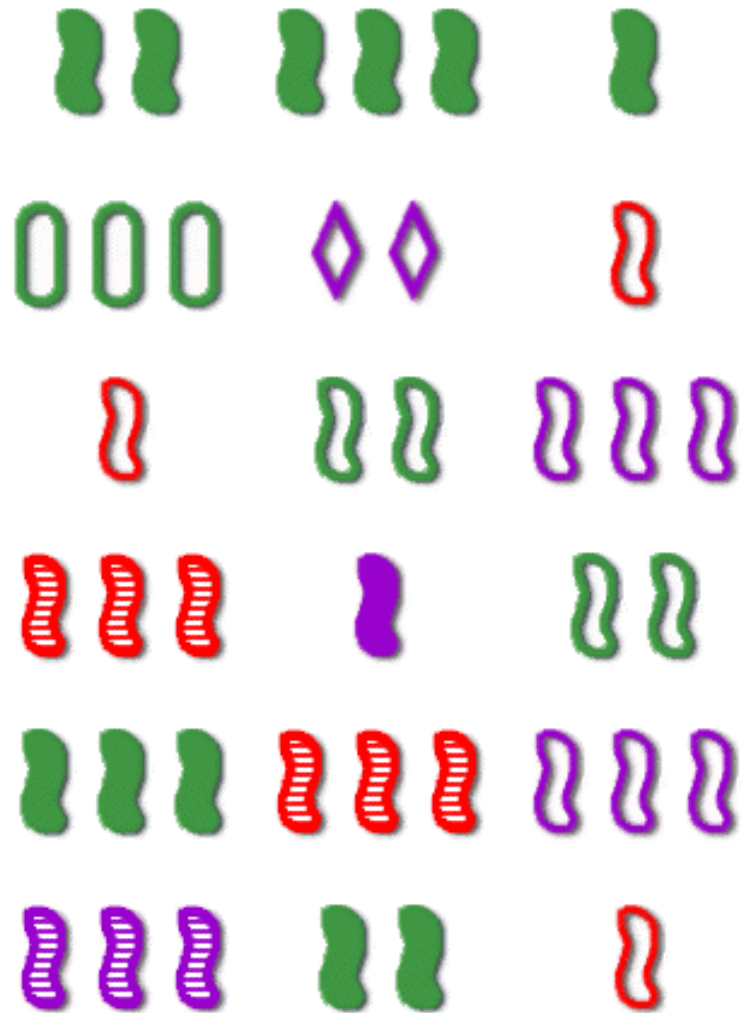
The SET Game as a puzzle

find the 6 SETS in the 12 cards

www.setgame.com



The SET Puzzle answers



What did Tom do?

- ▶ *Tom could apply the logic to these spatial arrays of patterns to see these combinations a lot faster than Andy could.*
- ▶ *Playing SET quickly is a whole brain achievement. The cognitive process involves applying the logical rule (same or different) to the spatial array of patterns to pull out a SET.*
- ▶ *It has been said that the creative act involves our brains internal mediation of the two ways we think. This is at the heart of playing the SET Game.*

What did bringing out this aspect of Tom's intellect do?

- ▲ *This experience gave Tom a hook into what he previously thought was Andy's world. There were 'brainy' things he could do! He 'had his place' in the intellectual world. This built a different relationship with Andy. Tom got a sense of confidence that gave him a foot in Andy's circle, and Andy gained a new respect for Tom – it built a more solid relationship -- it built community.*

Yesterday, one of the teachers shared how he had a young student (3rd grade = about 9-10 yrs old) who was labeled LD and really struggling in school, rarely participated in any activities, rarely raised her hand, would not even try to respond in class. He said that she had a hard time at first understanding the game and finding SETS. Then, all of a sudden after a couple days of trying it, something “clicked” and she was finding every kind of complex configuration and winning every game! The very next day after it “clicked” (she saw the patterns, classified the information, used logic to form the SETS) she was raising her hand in math class, doing the work, taking risks to attempt to figure things out. He was amazed!

Set as an early reading tool

- ▶ *Because a student is 5 or 6 he/she doesn't necessarily have the symbolic classification skills needed to read.*
- ▶ *In SET you must identify likes and differences – and the big symbols – make it easier for youngsters with seeing problems.*
- ▶ *You are classifying and making associations.*
- ▶ *So SET can be seen as a tool to help in reading -- the spontaneous organization of abstract symbols such as letters and words, which then unveil meanings and ideas.*

But, SET goes beyond likes, differences and classification and associations

- ▶ *Fluent reading* is the result of creating 'features' in the mind as we read. Features are bits and pieces of information that the fluent reader uses when looking at the letters, words, sentences and paragraphs. The reader may gather them from anywhere, as he/she scans left to right and diagonally down the page.
- ▶ Similarly, the cards the SET player must find to make a SET may come from anywhere, but their meaning is simply that they must form a SET.

Track II. Learning words, spelling and sharpening mental acuity playing games

- ✦ *Continuing on the theme that great intellectual games can teach a lot and build community we will next play a game based on making words – called Quiddler.*
- ✦ *Quiddler is a word game in which the players with the best vocabulary don't necessarily win, because 'spatial' thinking comes into to play.*

The Quiddler Game Rules

- ▶ *You must combine your whole hand into words (one or more).*
- ▶ *It starts with 3 cards in the first round, and then goes to 4, etc., up to 10 cards in the last round.*
- ▶ *You build words by drawing and discarding in turn.*
- ▶ *There is a bonus (10 points) for longest word, and 10 points for the most words in each round.*
- ▶ *You can use a dictionary when its not your turn.*
- ▶ *Words must be in the dictionary.*

Quiddler game play characteristics

- ▶ *You “just make words”. You get cards with single or double letters in your hand and you have to arrange them into words. It’s simple, but the key skill is to ‘take in’ all the info at once.*
- ▶ *This skill -- grouping, lumping, seeing in bunches, is a key skill that Quiddler develops. It’s significance obviously extends beyond learning spelling and vocabulary.*

Most obvious features learned

- ★ *Spelling*
- ★ *Word recognition*
- ★ *Vocabulary*
- ★ *Addition*
- ★ *All important, but the subtler aspects may be more important in the long run. Let me give you an example:*

Quiddler game play –4 and 8
card rounds.

Features learned in both games

- ▶ *Mental agility to examine data over a spatial domain and convert it into useful information.*
- ▶ *Building speed in performing these processes.*

Features good games must have to use them in the curriculum

- ▶ *They must be fun to play.*
- ▶ *Quick to play and get value from.*
- ▶ *Preferably allow students to join at any time and leave at any time and still get value.*
- ▶ *Never become “old hat”.*
- ▶ *Involve various level of thinking and learning*
- ▶ *Have more than one route to an answer.*
- ▶ *Have an element of luck so students don't feel embarrassed or reluctant to play.*

Building community between schools and parents

- ▶ *Games provide an easy means and some motivation for parents to get involved with Johnny's school work.*
- ▶ *Ability to have Johnny take games home from a "game library".*
- ▶ *Repeated play – possible at home – enables a games' value to be realized – just as exercises need to be repeated for exercises to be meaningful.*

Finding Intellectual Games

- ▶ *The important thing is whether the students enjoy playing the games.*
- ▶ *There are a limited number of good games that can be used in a classroom setting – many take too long to play.*
- ▶ *Children are keenly aware of the issue of superiority in intellectual games. For full participation, the game must be designed so that all players have a chance to win.*
- ▶ *With few exceptions, intellectual games are found in specialty game and teacher supply stores around the country. The mass market stores don't make enough money to carry them.*

List of good games

good games have more than
one right answer

- ▲ *Backgammon, Checkers, Chess, Cribbage, Dominos, Mill Game, Octi, Quixo, Quarto, Quiddler, Ricochet Robot, Scrabble, Set, Three for me.*

Integrating Games into the K-12 curriculum

- ▶ *Just as gym has been integrated into the curriculum, in our effort to “Reach for Balance”, intellectual games should be integrated.*
- ▶ *Great games have proven “track records” for winning attention of kids and encouraging them to play repeatedly.*
- ▶ *Research needs to be done to quantify the gains possible from incorporating intellectual games into the classroom.*

Discussion

- ▶ *Integrating ‘intellectual’ games into the curriculum can address both social and intellectual learning needs.*
- ▶ *It is possible to use the ‘fun’ aspect of games to build community through the ‘opening up’ of intelligences that playing games fosters.*
- ▶ *Parlaying the best game inventor’s thinking, and the needs of teachers, can enable great games to help students of various intelligences achieve higher goals, and all of us to “reach for balance in resolving educational dilemmas.*

Conclusions

- ▶ *Great games can build social relationships and intellectual capabilities.*
- ▶ *They can help us “Reach for Balance” by fostering an environment that allows students with diverse intelligences, backgrounds, and/or cultures to appreciate each others gifts, while furthering the core curriculum.*
- ▶ *Focused attention on integrating these ‘intellectual’ games into the normal curriculum promises both short term and long term benefits.*

Final Comment and Recommendation

- ★ *A special subcommittee of ASCD should be formed to investigate intellectual games with the goal of suggesting ones that could be used in the core curriculum, and suggesting ways to use them.*

Obvious needs

- ▶ *Fun*
- ▶ *Short time to play –*
 - ▶ *Must to fit into daily schedule.*
 - ▶ *This eliminates scrabble and chess during class time.*
- ▶ *Logical component and right brained component*
- ▶ *Repeated play capability*
 - ▶ *A challenge each time it is played*
- ▶ *Inexpensive*

Less obvious needs

- ▶ *It must be fun repeatedly – just as playing ball is. For the value in exercising the brain is in the repeated performance of the exercise.*
 - ▶ *We are trying to build intellectual capability, not just test the level that is already there.*
- ▶ *It must be repeatedly challenging*

Ideas to include

- ★ *My background*
- ★ *My Quiddler demo given at the CAG*