The Teacher's Guide to Live Oak Games

By Patrick Matthews

When I started designing games back in 2001, I had no plans to make them educational. My goal was to design fun experiences that brought families and friends together. Not a bad plan, all things considered. In 2007, however, that plan changed. I received a call from a teacher who said he was using SiegeStones in his classroom.

Talk about an eye-opener! The idea of being both fun and educational lit a fire under me. I spent the next year examining how our games could be used by teachers – both in and out of the classrooms. I went to conferences, looked at after-school care programs, and talked to teachers about what they needed. This booklet is the result of my research. I hope it's helpful to you and if there's any way at all that I can help you with your class, please contact me at (800-214-4632) or through e-mail at pat@liveoakgames.com.

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Calaboose™

Calaboose is a fast-paced card game for 2-5 players, where players try to collect the highest value sets of outlaws in their own jails. It's for ages 12 and up, and is particularly popular with boys.

The math core at the heart of Calaboose is easy to miss – until you start playing. Then you find yourself running numbers in your head as part of the game. It's what I like to think of as a party strategy game. Sure, you'll be laughing and shouting while you play, but you'll also be thinking.

That's enough of me introducing it. Here's how Aaron Bradford Starr uses the game in his classroom.

Calaboose in the Math Classroom

By Aaron Bradford Starr

Introduction

Standard card games are all about math, and would be wonderful teaching tools for mathematics, except for one small thing: most people relate them to gambling, and other idle pursuits. And in a classroom situation, math teachers certainly don't need to be seen teaching the finer points of Five-card Stud and Blackjack, no matter how mathematical they may be!

So given that cards are inherently mathematical, what's a math teacher to do?

Play Calaboose!

Real Games and Real Skills

Calaboose has a number of things going for it, from a teacher's perspective. First off, it's an actual, genuine game, not a skill-building exercise. The students will appreciate that. The gameplay is fast, simple, and easy to teach.

But once taught, the students will be using math on a number of levels, some of which they may not even realize. And these are the sorts of habits that can only benefit a student.

Value Estimation: Each type of card has a different series of bounties that count as points at the end of the game, depending on how many the player has captured when you count up the scores. But each also has a value, which shows how easily it can be replaced in your jail cell.

This balance forces players to estimate the true worth of a card. A card that is high-scoring can be worthless if it is replaced too easily. This presents to the player the task of planning their actions based on an expected return. And if they can't score as highly as they want, they have to reverse their thinking, and try to lower their opponent's score by an even greater amount in order to win.

Probability Manipulation: How likely is it that a given card will last in one of your cells without being replaced by a higher-number card? How many bandits are there in the deck? How many outlaws? When is it wise to keep that Huckster in your hand, rather than sending him to someone else's jail?

The skill of estimation is important in math, and to weigh risks in this game, the players will soon realize they need to know some numbers, such as how many of the various cards there are. Even if they never consciously ask these questions, they will begin to watch for the patterns of play, and math is the science of patterns.

Planning and Forethought: Card games are difficult to play strategically, since the situation shifts so often and so drastically. Still, given the point values on the cards, the players will rapidly learn what a good option is, as opposed to a bad one. Later, they will recognize chances for maximizing gain by choosing between two good options, and minimizing the damage from two bad options. In Calaboose, all of these decisions will be based on the point values of the cards.

Translation of numbers and values into a more general awareness of a situation is a key to real-world application of math. "Story problems" and higher math, (even unfamiliar forms of mathematics the student already knows) are also aided by the ability to intuit what the relevant skill is, and what question is actually being asked.

Ways to use Calaboose

Have a rules sheet prepared for each student, and quickly go through the rules as a group. Divide the class into groups of 5 (the most economical division), making sure that at least one student from each group fully understands the rules, and that each group has at least one student who can shuffle a deck of cards (without mangling them). You're job as a teacher will be to arbitrate rules disputes and keep the chaos level down. This is a game about the Wild West!

As this is a card game, have each group count their deck before play begins. Every group should have 74 cards before *and after* the play session! Have each group play a few games, to get a feel for the rules. How does gameplay change if they play three games and add their scores for a total to determine the winner?

When the players are comfortable with the way the game works, give them a few Calaboose related puzzles, and see if they can translate their knowledge into answers. The specific answers aren't as important as the methodologies the students come up with to formulate them. Some possibilities are:

Simple:

- What fraction of the deck is Bandits? Percentage?
- What two types of Outlaw have as close as possible the same percentage of the deck as Hucksters do?
- If you have to have exactly two different types of outlaws in your jail at game end, which two types will give you the highest score? The lowest?

Complex:

- If your jail cells, at the end of the game, had the same percentage of Hucksters as the full decks does, how many Hucksters will you have? What is the highest score possible if you could choose *any other cards* (not Hucksters) to fill the remaining jail cells?
- In a 2-player game, if neither player has the same outlaws in their jail as their opponent, is there any way that two could have a tie score?
- In a 5-player game, how many turns can the game continue before a player is forced to play a Huckster?
- In a game with 5 players, if there were no Hucksters, and no special cards (Jail Break and Bad Whiskey), how many Bandits can survive to be scored at game end, assuming all the players tried to score the most Bandits?

In order to answer these questions, let the students examine the structure of the deck, and formulate the answers in groups. Compare the answers of the groups, and, where they are different (and they will be different… some of these questions are tough!), concentrate on the reasoning process behind the two methods, rather than ferreting out which of the answers is correct. Even when two groups arrive at the same answer, they can often do so using different methodologies, which is another important feature of mathematics: there's always at least two ways to handle a problem.

In conclusion…

Math students aren't going to look at Calaboose and think to themselves, *Gee, another variant on flash cards*. As mathematically sound as the game is, the students will be drawn in to the aspects of it that aren't mathematical. Use that to your advantage, and let them have fun playing it, since fun is a key to using games to teach. The math is there, whether you, as a teacher, choose to emphasize it or not. In order to play the game, they have to use their skills. In order to play *well*, they'll have to sharpen them.

Not bad, for a simple card game, huh?

Aaron Starr designs and runs educational and creative workshops for children and disadvantaged youth. His main focus is on getting kids interested in math and science by using interactive games, art, and puzzles. He has worked as a writer, artist, and educator in Chicago, Tucson, and Cleveland.

Calaboose outside the classroom

Calaboose works great in Games Days, after school programs, and for clubs. Because it can take up to 45 minutes, and often promotes a great deal of silliness, it's perfect for that kind of setting. It's also a fun one if you're looking for a game to suggest to parents. Take a look at our FAQ online, as well as our strategy guide. These are both great resources for clubs.

For new players, consider taking two of the Gunslingers out of the deck the first couple times you play. Having all the Gunslingers in the deck can make the game a bit wild and crazy at the end. With new players, we've found it's sometimes easier to let them ease into the game before dumping them in the OK Corral.

SiegeStones™

SiegeStones is an abstract strategy game for 2 to 4 players. Refreshingly, it only takes about 15 minutes to play. Don't let the quickness fool you, though. It's a thinking game, and delivers a classic "abstract strategy" experience of people sitting around a board and enjoying the challenge of striving against each other.

That's enough from me. Here's how Aaron Bradford Starr uses the game in *his* classroom.

SiegeStones in the Math Classroom

By Aaron Bradford Starr

Introduction

Most students are taught to dislike math. Yes, *taught*. Many young children develop a noticeable bias against math as soon as they enter school. Where this bad reputation comes from is not as important as the problems it causes in getting the students to learn the skills they'll need. Grudging students are not as motivated as interested ones. So, how to interest students in math? Go back to how the mathematicians from the past intrigued their own students. Play games.

Real Games

The idea of using board games to teach is ancient. Nobles used games to teach their sons strategic thinking and tactical ability, while philosophers saw the value of games in training awareness and insight. There was a broad acceptance that games trained the brain, and they were held in high esteem.

But for the last century or so, the concept of the "Educational Game" has been that the game should directly teach a particular skill or set of facts. These "games" are, in fact, often nothing more than glorified tables and charts, or tests and worksheets given one question at a time. Students sense this. They know the feel of a worksheet, even if it's printed on cardstock in bright colors. While better then doing rote memorization, they have none of the qualities of a game: an interesting and evolving situation requiring forethought and choice. In short, they aren't *fun*.

A real game, on the other hand, has numerous advantages, and almost none of the disadvantages of a traditional educational game. Real games are designed to be enjoyable first and foremost. People *volunteer* their time to play them. How many groups of kids spontaneously break out the flash cards on the weekend? Any?

Mathematicians have, throughout history, used games -both physical and mental- to stimulate the sort of creative thinking needed for math. Nowadays we use the term "lateral thinking", but it boils down to the same thing: being presented a situation, and seeing it in a way that is clever, new, and, most importantly, valid. Since games by definition have rules, they validate themselves.

Skill building examples

The skills that real games require are many, some being so fundamental that they seem to go without saying, but these skills form the basis of learning itself, and aid learning math in particular. Taking just the basic SiegeStones game, we can list a number of core skills that will help math students.

Formal System Use: First off, real games have rules. While this seems obvious, the fact is that in order to learn and play a game, people have to practice the skill of learning, and applying what they know of the rules to an evolving situation.

Nobody can deny that this is exactly what a math teacher is trying to do: convey the rules that control how to solve the problem at hand. When math is conveyed as the rules to puzzles and games of different kinds. If the student knows that when their teacher says game, they mean something actually involving fun, they'll pay more attention. And Siege Stones is undeniably a "real game" that people actually play outside of classrooms.

Pattern Recognition and Visualization: While SiegeStones uses addition, and this may be of value as practice for younger students, the benefit to math students of every level is that in order to play the game, you have to have a definite plan. There is no roll-and-move here, so beloved of the last century. If a player is to make any move, they must think it through. This will involve forethought, and require the student to imagine different future game states.

This is how games help develop “patterns of process”. The player will begin to recognize strategies that help them capture towers along the edge, for example, or towers in the middle space. These strategies are systems of changing the situation from looking like it *does*, to looking how you *want it to look*. And isn’t that what math problems are? In the real world (and in higher math) the challenge is often recognizing which math skill is needed for the problem at hand, and that’s an ability SiegeStones can help build and develop.

Dynamic Problem Solving: When players start to plan two, three, or even more moves ahead, and think strategically, they’re tackling dynamic problem solving. They know they have an opponent, who can do unpredictable things, and must keep in mind a vague cloud of potential actions. Math problems, on the other hand, also seem to do unpredictable things, and the ability to recognize and handle that situation is important. Is the unexpected result a matter of student error? If so, where?

Perhaps more than any other subject, math frustrates students. By linking the process of solving math problems to the problem of how to achieve some goal in a game, math teachers can change the way in which students think of the math that challenges them. The transformation from bitter frustration to intrigue can be helped by playing games. But how?

Ways to use SiegeStones

First off, explain the rules to the students as a group, preferably with each student having their own copy of the rules. The rules sheet will help in conveying the basics as simply as possible. Organize the students into groups, and have them play a few games, to get a feel for how the game works. 4-player games are most economical, of course, but, if possible, have players play 3- and 2-players games as well, to see how that changes their strategies.

Once the students have a firm grasp of the rules for SiegeStones, build questions around the gameplay in the form of puzzles, and see if students can answer them. Some possibilities are:

- How many turns can go by before one player is *guaranteed* control of a tower so it can't be taken away?
- How many stones can be reduced to a threat rating of 0, if you can place the all stones and towers as you wish?
- What is the greatest number of towers any one player can control in a game, if they play as well as possible?
- If you could place all 20 pieces and 9 towers for any one color as you wish (as opposed to playing a normal game), what is the highest total threat rating you could arrange? What's the lowest total?

All of these examples could be extended to situations involving different player numbers, or other variable, and the students can try to figure out why this would change the outcome.

This is a great way to introduce the concept of analysis, and the students won't groan the way they do about traditional "story problems", which were meant to do the same thing. The puzzles all require not just arithmetic skills, but mathematical ones of a deeper nature. The students have a problem presented to them, and can solve it as they wish. But the best part? No matter what strategy they choose, they'll need to use math to answer these questions, even if they don't realize it.

Just like most math in the "real world".

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Use SiegeStones to connect with kids

Because it's quick to play and the rules are so easy to learn, SiegeStones represents a great opportunity for teachers to connect with kids. Nothing builds a relationship like playing a game together, and SiegeStones is a game that facilitates that in three easy ways:

1) It provides a level playing field - giving no advantage to the adult.
2) It's quick to play, allowing you to have an uninterrupted game, and inspiring the desire to play again.
3) It's easy to understand. You'll be up and playing in five minutes or less. Teaching kids is likewise simple.

Here are some easy ways to get started playing with the students:

- Try challenging some of your students to a game, and see how they react.
- Offer a reward to anyone who can beat you.
- Play the game with another faculty member during lunch, where the students can see you.

Use SiegeStones as an exercise in game design

A year or two after SiegeStones was published, we held a contest for SiegeStones players to see who could design the best game that used only what is in the SiegeStones box. That contest is over now, and we've posted the top eight games on our web site (www.liveoakgames.com).

The idea, however, translates very well to a class project. Have the students design their own games, using only what's in the SiegeStones box. Play the games and analyze them. Is there an advantage to going first? What are the decisions the players have to make?

If you do hold a game design class, and you'd like some prize support for the winning game, please contact us. We're happy to help!

StoryTellers™

As a writer, Storytellers is a game that is near and dear to my heart. In the game, players work together to tell a story, while at the same time focusing on the effective elements of storytelling.

It's lots of fun. Once you take the game into the creative writing classroom, however, it turns into something really special – a game that gets students focusing on what works in their writing instead of what doesn't. I hope you enjoy these guidelines for using StoryTellers in the Creative Writing Classroom!

StoryTellers in the Creative Writing Classroom

Where are your students in their creative writing process? Are they still having troubles letting their imaginations run free – or are they spreading their creative wings? Are their concerns over the rules of language and grammar stifling them – or are they mastering new ways of using language to their advantage?

Regardless of how advanced your students are, they'll benefit from relaxing with the creative process, from having a chance to stretch their imagination in a supportive and fun way. That's where StoryTellers comes in. These instructions will show you how.

One quick note: make sure you read the section called "customizing the game"!

Preparing for the Game

Preparing for a class of storytelling is quite easy. Follow these simple steps and you'll probably be done in less than five minutes:

1) If you only have one copy of the game, bring in some pennies, chips, or chalk to use as extra Bravo Chips. The game has 15 bravo chips in it. You'll need three per player, but just about anything will work.
2) If you have some interesting hats, bring them out. You can also encourage the students to bring hats. If you are lacking in hats, make some hat cards out of cardboard. The game includes five hat cards, but you probably have more people than that in your class.
3) Decide how long you want to have the writing phase work. Players are going to be writing and then reading (and discussing) their pieces, so keep that in mind. If you write for an hour, the game could take a very long time. 10-15 minutes is a good amount of time.
4) Decide which story prompt to use. The game includes 53 storylines to get things started, and there are more at http://www.thestorytellersgame.com. Click the link called Storylines to see them.

   You should also feel free to use your own storyline – or just pick one at random once everyone has arrived.
5) If you picked a Storyline, write it on the blackboard in big letters.

That's it. You're ready for the class!

When the Students Arrive

If your students are mature enough, separate them into groups of about five players per group. If not, have one big group.

Once everyone is in their groups, you have a few simple tasks to do:

1) Make sure everyone has a hat or a hat card.
2) Deal out five Craft Cards and 3 Bravo Chips to each player. Depending on how many players you have, you might not be able to get deal out five Craft Cards. There are only 53 in the box. Just deal out as many as you can (making sure everyone has the same number of cards).
3) Leave the Heckle Cards, unused Craft Cards, and unused Bravo Chips in the boxes and stash them somewhere. You won't need them.
4) If you did not pick a Storyline earlier (see **Preparing The Classroom** above), pick five random storylines from the StoryTellers instruction book and read them to the group. Use a show of hands to select the most popular. Write it on the blackboard so everyone can see it.

Now you're ready to begin!

Introducing the Game

By now, your students are probably starting to wonder what's going on. It would be good to tell them. If you need help, here's a little script you can use:

"Today we're going to play a writing game. Here's how it works. We're all going to write based on the story line written here. We'll write for 10 minutes. You can write about whatever you want, in whatever style you want, but you have to include the storyline somewhere in your piece. It can start the piece, end the piece, or be included somewhere in the middle, but it has to be there."

"Before you start writing, however, there are a couple of things to go over. One is that you'll be given the opportunity to read your piece aloud after everyone is done. Don't worry. We're not being critical here. You're not being graded. Nothing is stupid or embarrassing. On the contrary, we'll be using the Bravo Chips to applaud each other."

"Another thing to do right now is to look at your Craft Cards, and pick one or two that you want to use. ***You cannot use more than two!*** *When you're reading your piece, you'll get a point for each of card you have incorporated into it. If they look too intimidating, ignore them. The Craft Cards are just additional things to keep in mind – ideas to use if you want to. Keep all your cards, regardless of which ones you decide to use. They'll come into play later."*

"We won't start reading until after everyone is done, and you don't have to read if you don't want to. Listeners are great to have too. Ready? Okay, then. Let's have some fun!"

Playing the Game: Phase I

Now it's time to write. Everyone writes a piece that somehow incorporates the Storyline selected. This piece can be anything – poem, story, narrative, fiction, recipe book… whatever. The key is to write. Let everyone know the time limit. Ten minutes is a good time limit, but you can go longer if you want.

I encourage you to write also. Nothing will build the students' enthusiasm like seeing their teacher enjoying the creative process.

Playing the Game: Phase II

When the allotted time is up, give a warning to everyone to wrap things up. Give them a couple minutes, and then insist they stop. Make sure you let them know that their pieces don't have to be finished. They can always continue working on them later.

Make sure every player has a hat (or hat card) in front of them. It's time to do some reading.

Here's a script to read:

"Now we're all going to get a chance to read our pieces. You don't have to read if you don't want to. When someone is reading, the rest of the group should listen quietly. If you hear something you want to applaud, toss a Bravo chip into the reader's hat. You could be applauding because of the writing or the reading, it doesn't matter. The Bravo Chip is how you say 'Bravo!' and it's worth two points at the end of the game. When you're reading, this is worth keeping in mind. If your piece warrants it, really ham it up and perform for those Bravo Chips. You don't have to sit motionless in your chair while you read. Feel free to stand and move around and gesture. To everyone else, don't forget to toss your Bravo Chips. Otherwise, they'll count against you at the end of the game."

"After each reader has finished, we'll look at our Craft Cards. If something was read that matches one of your Craft Cards, bring it up. If the group agrees, you get to drop that card in your hat. It'll be worth a point to you at the end of the game. You'll also get a chance to complement the reader on what you liked about the piece. Remember, we're going to be keeping things positive. This is a game, not a critical analysis. You're not allowed to make suggestions or say anything negative. Also, remember that you can play a Craft Card on your own reading. You can't, of course, give yourself a Bravo Chip. When you play a Craft Card, immediately draw another."

"One last note: the groups are going to be reading at the same time, so do be respectful of each other. Try to keep the shouting to a minimum when you're reading."

The toughest part of this phase is getting the first person to read. Ask for a volunteer from each group. The readers are only reading to their own group – not to the entire class. It might also help that reading is the best way to score points. Once you have one volunteer from each group, you're ready to get started.

If you have a group that is small enough, use the Craft Cards as a starting point for a discussion on the piece that was read. They point out techniques that the writer used, but each group should feel free to move beyond this and discuss any other effective techniques that were used. Use the game as a launching pad for your own discussions.

If you have too many people, or your groups are not yet at the point where they can have those sorts of discussions, have the reader write on his or her piece which Craft Cards were played during it.

After a reader has finished and the craft cards have been played, someone else in the group gets a chance to read.

A Note for the Facilitator:
Ideally, you'll join one of the groups and not have to lead the discussions. You would simply be another writer. However, your creative writing class may not be at that point yet. If this is the case, spend Phase II drifting between the groups, listening and encouraging.

Keep an eye out for negative comments and respond quickly and emphatically if you hear any. Everything here needs to be kept positive. If you need to address something like swearing, inappropriate language, or subject matter that is not allowed in the classroom, do so in a way that doesn't tear down the writer's work.

You also should make sure you are available in case a group is having trouble getting another person to read. If you are not able to solve the problem, have the group merge with one that has more active readers.

You may also need to handle the problem of no volunteers at all. If no one wants to read, volunteer to read your own work to kick things off. If people still don't want to read, make it anonymous: collect the papers and flip through them. Then select one to read without telling anyone who the author was.

Winning the Game and Scoring

After everyone has finished reading, each group should vote on awards. There are Award cards in the StoryTellers box to use. If you don't have one copy of the game for each group, however, you can simply hold up the cards and announce what is being voted on.

Awarding these should be an open vote. This is to be a positive experience. Vote on the story that is the most appropriate for each category (Creative, Hilarious, Surprising, or Dramatic). This is not a "who is best" issue. It's a vote on which story fits the award the best. Each award recipient should drop the award into his or her hat.

Here's the script for the end:
"Now it's time to score. Look in your hat. You score 1 point for each Craft Card, 2 points for each Bravo Chip, and 3 points for each Award. Subtract 2 for every Bravo Chip that you didn't toss during the game."

Customizing the Game

Depending on the proficiency level of your class, here are some alternate approaches you might want to take:

1) **Simplify it!** Limit writers to only being allowed to use a single Craft Card, instead of two.
2) **Use a common hand.** Instead of dealing each player a hand of Craft Cards, post them on a paper so everyone can see them. People still get points for recognizing when the Craft Cards are used.
3) **For Really Advanced Writers:** Reveal a single Craft Card at the beginning for everyone to see. Then, as the writers are writing, reveal another Craft Card. Then another. Space these out. For example, if you're writing for 15 minutes, reveal a new card every three minutes. This is tough, but can make for some truly zany writing, which is fun if you have an advanced group of writers that is ready for it.
4) **Ask the students to create Storylines!** Once they're comfortable with how the game works, have the students create story prompts for you, and pick one randomly at the beginning of the session. This can be extremely exciting for the students.
5) **Do a series!** Have you noticed that many of the Storylines feature repeating characters? If one session goes particularly well, select another Storyline featuring the same character the next time you play. Select one of the previous stories to read aloud before you start, and then give the prompt. Because the students will have all heard that story, the stories they write will have a shared history and increased depth.

Discussion Points

The key to discussing the works is to get the students thinking positively about their writing. Focus on what works in each piece, and look for unusual things. You want to help your students change focus from what doesn't work to what does.

It's absolutely vital, therefore, that you stay upbeat during the game – which means no suggestions or critiques. You want the students to leave the class encouraged about their writing. There's plenty of time to discuss flaws later. This class should be all about the enjoyment and freedom that comes from creative writing.

Here are some ideas for things to keep an ear out for:

1) Great descriptions – particularly those that involve all five senses
2) When a reader gets an emotional response from the listeners
3) Unexpected details or actions that contradict stereotypes
4) Tricks of the trade– similes, metaphors, alliteration, onomatopoeia, rhymes, and so forth.

Follow Up Classes

The class after the game is filled with possibilities. Hear are a few:

1) Talk about the stories and what was learned. Discuss techniques that didn't work or could be improved. Point out techniques that have also been used in some of the other reading you've been doing in class.

2) Compare and contrast. Five people writing on the same story prompt probably went five different directions. The comparison between those writings can be very interesting.
3) Continue! Select a piece (or pieces) that you want to have the class continue as a group. Talk about where the story could go next, or how it could be best developed.

Attitude and Celebration

This game is intended to stimulate creativity and discussion. If you find that any element (Craft Cards, Award Cards, Points, etc.) does not work for your class, leave it out.

On the other hand, if your class really grooves on the competition, start looking to see what kind of tangible awards you can hand out. Maybe have a giant cookie (big enough to share, of course) as the award for whoever wins the day. You could also print up a StoryTeller competition ladder so that students can draw their competition out between classes.

It's all about great writing, building camaraderie, and having a laugh or three along the way. So relax and have fun with it!

Getting Published

If you find that some of your students pieces are simply too good to ignore, let us know. We'll be more than happy to publish them on our web site, along with your bio and the student's bio!

Live Oak GAMES

www.liveoakgames.com