

# Tech-less Game Design:

*Bringing Tabletop Games Into the Classroom*

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# Tech, games and students

*"I got re-interested in board games because they were something I had played as a kid and stopped. Now I really want to play them again." - Student*

# Games have been in education for ages

- Gameplay offers unique opportunities for engagement and targeted skill improvement
- Students have been designing games for other students
- Recently, making video games is a great way to learn many 21<sup>st</sup> century skills
- Video games have capital with students, they are cool (cheesy as that sounds)

# We have done a lot of work with video games



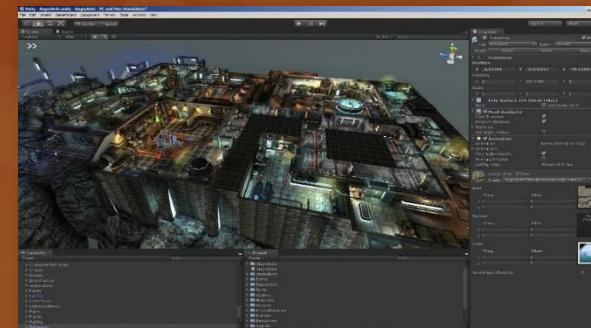
Dota 2



The Stanley Parable

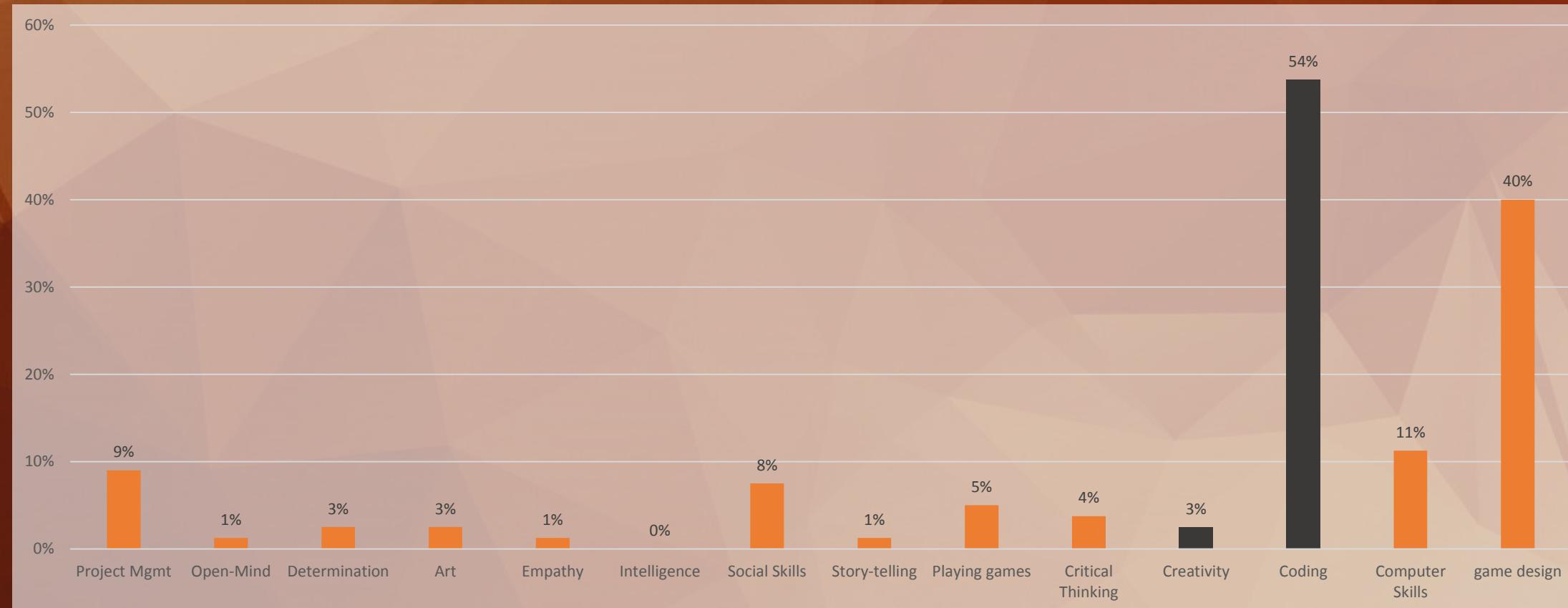


Portal 2



Unreal Engine 4

# In fact, we asked kids what they learned after a game design course



# When it comes to making games, technology gets most of the attention

- Majority of students in the games course focused on tech-heavy skills
- Skills like creativity, collaboration, and design-thinking were overshadowed
- Making games has value beyond just technical skills



# Tabletop game making has the design challenges without the tech-heavy lifting

- Students are not bound by technical hurdles
- Challenges many 21<sup>st</sup> century skills in a creative and fun environment
- Focus can be on playtesting and taking feedback, rather than de-bugging code
- Cost-efficient

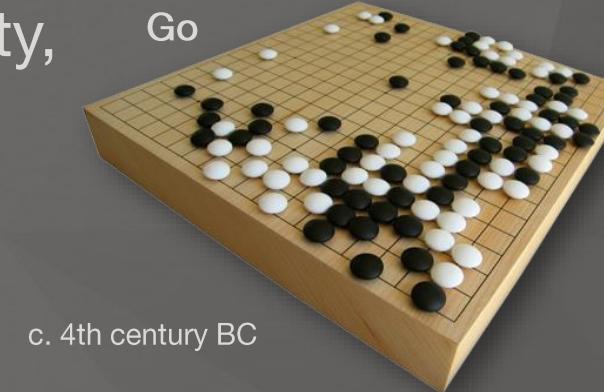
# Tabletop with foundry10

*"We didn't have to worry at all about the technical stuff and how it looks. We could print something up, paste it to cardboard, and go and play."*

*- Student*

# Learning from games since 300+ BC

- Board games have existed for thousands of years
- People have been learning from these games since our earliest origins
- Board games evolved toward complexity, but core concepts remain



c. 4th century BC



c. 763 AD

# Tabletop offers a bunch of benefits

- Faster iteration time
- Minimal technological hurdles to overcome
- Challenge comes from collaborative and/or creative problem solving
- Easy for students to share with friends and family
- Inherently social experience, much face-to-face time with peers

# Focus on playtesting and iterative process



- Tabletop games elective that met once a week for 1.5 hours
- Primary focus on building out game concepts and mechanics through play
- Students chose groups on day 1, and decided on concept
  - Calamity, Heist, and Vikings

# Assembling the parts

- Parts are cheap and easily obtained on Amazon.com
- Used whiteboards and markers for board prototypes, then figurines, dice of all types, colored tokens and pawns, and stickers as needed
- A full set of re-usable materials (excluding whiteboards) for 30 students could be bought for less than \$150
- For a guide with links, see [foundry10.org/ttg-supplies](http://foundry10.org/ttg-supplies)



*Dream big*

# What students learned

*"It really gave me the ability to focus on games much more analytically, and look at games in a broader sense. They are basically systems."*

*- Student*

# A different approach to games in learning

- Immediately clear just how different tabletop games are from video games
- Student soft skill (like creativity or determination) recognition
- Students connected with their game ideas on creative level
- Let's get into what the students said...

# Areas of learning, as recognized by students

## Commonly stated:

- Collaboration & communicationn
- Backwards engineering
- Design thinking

## Still present, but not as common:

- Dealing with complex systems
- Compromise
- Accepting/implementing feedback
- Iteration
- Empathetic design



Hard work/play

# Taking that learning elsewhere



- 100% of students said they could use these skills in other classes
- Without tech, skill gains are not limited to computer-based fields

# When asked about the skills they gained:

“Being able to articulate your points to other people so you can get something as close to your vision as possible while including everyone else’s ideas. Good communication skills.”

“The ability to look at systems analytically. Design for specific audiences and around specific visions. Teamwork too, I had to make a lot of compromises.”

“I would say especially learning how to work from the top-down. That will help in any aspect of life like writing a research paper. Finding that little fun nugget in different aspect of life, like math class.”

# Would your game sell? Why?



- We asked students to explain why their game would or would not sell
- The goal was to see how students were designing with regard to their audience
- Most students focused on their design, rather than the needs of their fans

# Empathetic Design

- The selling question offered insight into empathy
- Designing a game requires a notion of “what is fun”, which is highly subjective from person to person
- With older students, this offers an opportunity to bring up concepts like emotional intelligence

# Other interesting points

- Students learned a huge amount from “expert” visitors
  - They mentioned these as the most useful part of the class
- “Start with the story you want to tell, and build down from there.” design concept
- An eye into the industry

# Running tabletop

*“You get to do lots of play, lots of testing... Because in order to make a change all you have to do is write a new rule, or scratch out something on the board and rewrite it.”*

- Student

# Simple to get started

- Technical knowledge barriers are low
- Costs roughly \$70 for enough materials for a 30-student class
  - Most of the materials are re-usable too
- Flexible, students can work on their own ideas but still gain necessary skills
- Email me for a full list of resources

# Start with play, then don't stop

- Spend the first few sessions just playing fun games, with a variety of different functions
  - Resource management, conquest, deck-building, negotiation, and logic are all types of game mechanics that exist
  - For a list of good games to start with, check out [foundry10.org/ttg-supplies](http://foundry10.org/ttg-supplies)
- Get to internal playtesting quickly, allowing students to iterate and collaboratively design
- Introduce uninvolved students from the school to serve as play-testers
  - Great for students to invite friends and peers
  - Note: students need to silently observe their games being played, its important to not interfere with playtesters

# Adapting the subject

- Flexibility is a big benefit of Tabletop games
- Board games have been used in many classes to demonstrate key concepts
  - WWII by Pete Pellegrino
  - Monopoly and the Great Depression
  - Chess for logic, decision making, and observation
- It does not have to just be making games, playing them has inherent value



# Make use of local communities

- Game experts exist all over the world, even at your local game shop
- Game designers are way more prevalent now as crowdfunding has made the entire profession more accessible
- There are tons of online communities to check out, many of which can give you an idea of games to look into
- There are even “open-source”, DIY board games available that utilize pieces made of Legos, cardboard, or other odds and ends

# Questions?

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