



LEVEL 3

ON YOUR MARK: STRUCTURE, DESIGN, AND PURPOSE

What goes into designing meaningful and impactful instructional games?



By the end of this level, you will be able to:

- ★ Clarify the role that technology plays in both game design and player motivation
- ★ Identify the elements of the #PowerUpClassroom GBL Design Framework
- ★ Consider the impact of content, delivery, and assessment on game design
- ★ Compare your players' intrinsic and extrinsic motivators



Team dynamics are tricky things. Some teams are highly productive, building off the strengths of each team member, and others are highly dysfunctional, struggling to work as a cohesive unit. Being a successful team member means that you need to be both a leader and a follower—often simultaneously. Ideally, you join a team because you want to explore a passion, and you genuinely care about the game or project. But hold up! Have you spent time with a group of passionate professionals lately? That can be wildly wonderful and overwhelming at the same time.

Let's think about your students. As the instructor, you are constantly weaving and remixing topics and lessons. Sometimes, technology plays a critical role in the project; other times, technology doesn't belong anywhere near the lesson.

So, determining the role of technology in your game design matters, and we have to set realistic expectations before we bring our ideas to our learners. But where do we start? Understanding the ultimate content, process, objective, and purpose of your game design is the first step in this planning process.

Let's dive into our #PowerUpClassroom GBL Design Framework (**Figure 3.1**). As we work through this, take the time to consider what areas of this framework you already have in place and what you can spend more time developing.

Oftentimes, our energy is best spent designing and building the lesson itself. The heavier lift at the beginning makes the latter stages smoother. Creating moments of learning that engage and entice learners to dive into content is the ultimate goal of any innovative educator. But what's the secret to motivating your learners? Motivation is tricky to control, so it's important to purposefully build opportunities for players to own and drive their learning.

Objective	instructional focus, standard(s), and hard skill(s) that the player will master through gameplay
Design	setting, tools, and action steps that the players will take throughout the game
Challenge	the purpose of gameplay itself
Assessment	process and elements that measure content mastery
Next Steps	extension of learning that motivates players to continue gameplay

Figure 3.1. #PowerUpClassroom GBL Design Framework

We can't always pinpoint exactly what motivates us to complete certain tasks. Sometimes, fear of "getting in trouble" at work is motivation for getting out of bed in the morning. Other times, that fear may not be enough, but considering that students depend on you to show up and teach them may be the factor that pushes us to start our day. Either way, motivation is incredibly personal and may be difficult to externally track.

Gameplay not only increases learner engagement but motivates certain learner behaviors, like persistence, inquiry, and mastery. Many social scientists believe that **extrinsic motivators** (such as money, fame, grades, praise, badges, and points) serve as only temporary rewards that will not sustain over time. **Intrinsic motivators** (like hunger for learning, self-worth, joy, intellectual growth, and curiosity) are considered more "pure," and are valued over a lifetime.

However, there is little clarity around whether external or intrinsic motivators exist independent of each other. Game-based learning incorporates extrinsic motivators like game mechanics but eventually leads to intrinsically motivated players. How will technology play a part in this entire process?



MEET THE GAME MASTER

**JAMES SANDERS,
FOUNDER OF BREAKOUT EDU**



UNLOCKING STUDENT ENGAGEMENT

Several years ago, James was at a conference with a group of teachers and students, and the suggestion came up to go to an escape room. The teachers were surprised to see how actively engaged the students were in problem-solving—a level of engagement they had never witnessed in a traditional classroom. James began to question: How do you bring the power of an escape room into the classroom?

🔑 *How do you bring the power of
an escape room into the classroom?* **🔑**

The concept is simple: There is a locked box, and students have to solve multiple challenges to unlock the box. While the concept is simple, the possibilities are endless. The lock represents the need to be right but the permission to be wrong in the process. There is no negative reaction when students input an incorrect code into a lock; they simply push forward until they get it right. This is very different from the traditional learning experience of hearing “you’re wrong” and is a process that promotes perseverance in problem-solving.

If you think of the types of problems our learners are going to grow up with and have to solve and the skills they will need to solve them, from complex thinking, to working in a group, to collaborating with diverse peers, how are we empowering them to persevere through roadblocks? The major problems of today (climate change, gun control, curing cancer) are essentially locked boxes that our students will need to open.

 *The major problems of today (climate change, gun control, curing cancer) are essentially locked boxes that our students will need to open.* 

NO TECH, LOW TECH, HIGH TECH

While Breakout EDU was initially designed as a game played with a physical box, it has evolved into a concept that can strategically leverage technology integration. Aside from the wide variety of both physical and digital games provided at BreakoutEDU.com, there is also a growing community of educators designing and sharing games for free. James shared that the most powerful games leverage a combination of both physical locks/challenges and digital integration, requiring students to find the necessary tools to solve a problem or challenge.

POWER UP

PLAY THE GAME

The most logical entry point for someone new to Breakout EDU is to find an opportunity to play the game yourself with your colleagues. You can then debrief and explore ideas on how this might work to provide engaging learning experiences in your classroom.

Recently, Breakout EDU launched student accounts, allowing teachers to add students to their classes and assign games. One of the most powerful aspects of this new platform is that students can now design games themselves, applying their learning through game design. The teacher can then approve the games and add them to the classroom library to be played by other students in the class. (You will learn more about the shift in learning ownership through student-designed games in the next level!)

Access Breakout EDU resources at **BreakoutEDU.com**, and explore how breakouts can be applied to specific standards that fit into your curriculum at **breakoutedu.com/learning** or by scanning the QR code.



POWER UP

MUSIC AND SOUND MAKE A DIFFERENCE!

If you want to really shake up the vibe of your learning space, integrate music and sound bites that add to the overall experience. Tone and rhythm affect workflow, and at times, the lyrics actually help to communicate expectations and objectives. See what sounds you can find, and when you find them, press “Play”!



POWER UP

MANAGE YOUR GAME SPACE

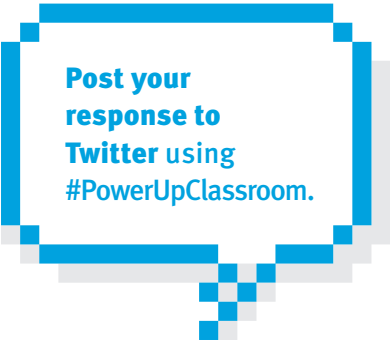
Designing a classroom space that supports game-based learning starts with clear norms that are truly internalized by all players. Start off your instruction by outlining expectations and practicing how to move and communicate in a collaborative gaming environment. You will gain so much by going slow first to eventually go fast.



YOUR CHALLENGE

Now that you've explored the content, process, objective, and purpose of your game design, take a few moments to record your thoughts and even share them! Choose a challenge from below to share either on Twitter, here in this book, or both!

- Based on the resources and devices you have available, how dependent on technology will you be in designing and playing games?
- Will you depend more on intrinsic or extrinsic motivation in your game design?



**Post your
response to
Twitter using
#PowerUpClassroom.**

ISTE STANDARDS CONNECTION

Let's Connect Your Learning to the ISTE Standards!

In this level, you learned about the role technology plays in both game design and player motivation. We also identified the different elements of the #PowerUpClassroom GBL Design Framework. We then reflected on this framework through reflective questions on content, delivery, and assessment. Lastly, we looked at the impact of extrinsic and intrinsic motivation in gameplay.

Level 3 aligns to the following ISTE Standards:



ISTE STANDARDS FOR EDUCATORS

Standard 5: Designer

Educators design authentic, learner-driven activities and environments that recognize and accommodate learner variability.

Indicators:

- 5a. Use technology to create, adapt, and personalize learning experiences that foster independent learning and accommodate learner differences and needs.
- 5b. Design authentic learning activities that align with content-area standards, and use digital tools and resources to maximize active, deep learning.
- 5c. Explore and apply instructional design principles to create innovative digital-learning environments that engage and support learning.

Congratulations! You completed Level 3 of #PowerUpClassroom.