

Up Your Game: Learning Through Gaming

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Time Frame 90-120 session(s)

Essential Question(s)

In what ways could game-based learning impact student factors like motivation, engagement, and the learning environment?

Summary

Meeting students where they are can seem like a daunting task, particularly when it comes to the ever-changing world of technology. However, using intentionally designed games can make learning fun, provide opportunities for critical thinking, and enhance knowledge related to mindset. Participants will have an opportunity to discuss translating practices to suit their program and walk away with resources that will help students get excited to learn through digital games.

Learning Goals

- Participants will associate meaningful learning with past learning experiences.
- Participants will understand the pedagogical supports facilitated by games (Engagement, Motivation, etc.).
- Provided with a specific game, participants will identify the learning associated with the game experience.
- Participants will explore/explain how to integrate games within a classroom learning experience.

Attachments

- 3-2-1 Handout—Up Your Game.pdf
- Breakfast Club Table Tents—Up Your Game.pdf
- Breakfast Club—Up Your Game.pdf
- Classroom Environment Scenarios:I Think, We Think:Research—Up Your Game.pdf
- Comic Strip Activity—Up Your Game.pdf
- DGBL Table Tents—Up Your Game.pdf
- Instructional Strategy Note Sheet—Up Your Game.pdf
- Session 22 Agenda—Up Your Game.pdf
- Slides CBW2018—Up Your Game.pptx

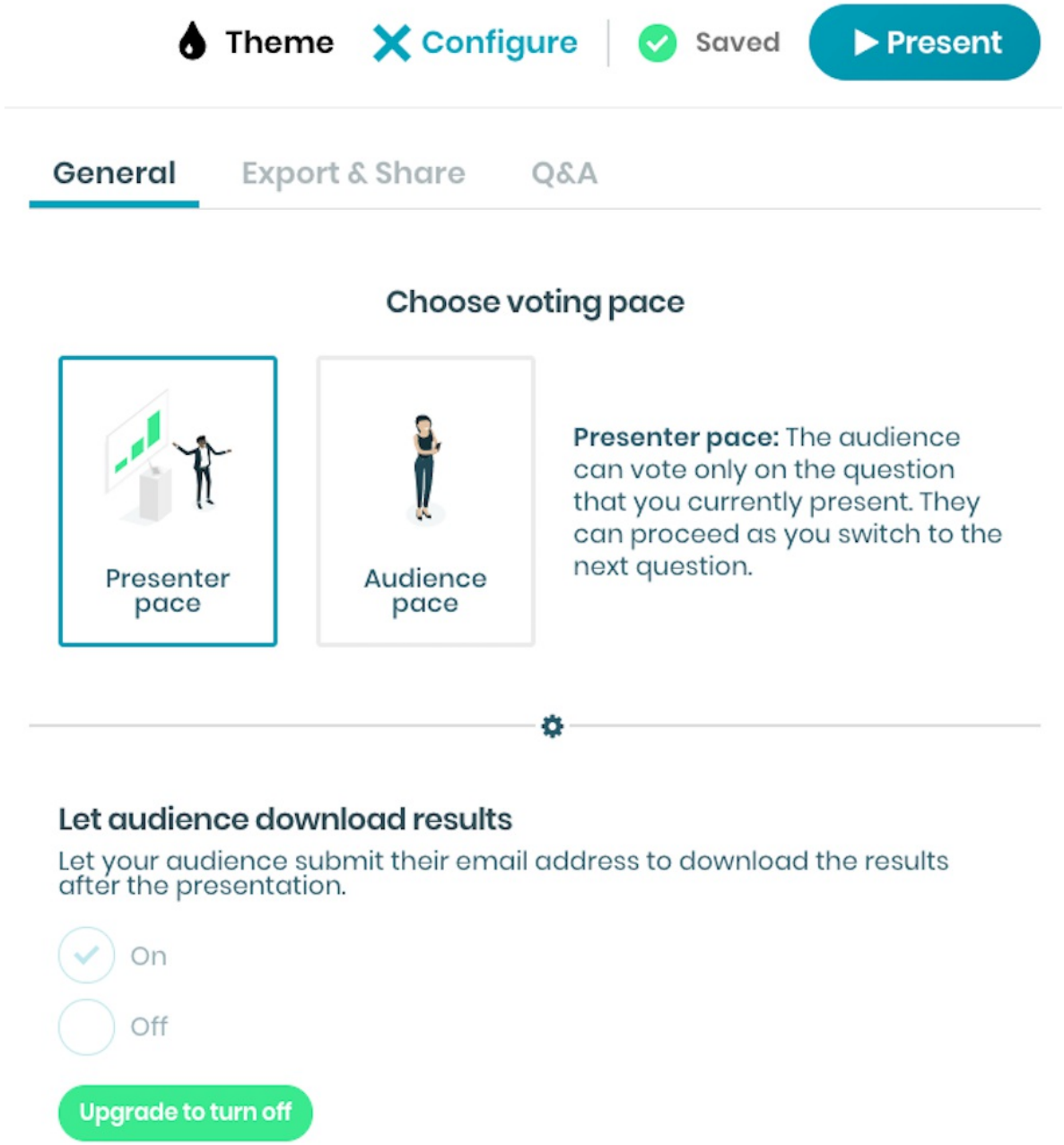
Materials

- Slides (attached)
- Agenda (attached)
- Instructional Strategy Note Sheet (attached)
- Comic Strips (attached)
- Devices with Internet capability (personal devices are acceptable for this session)
- Classroom Scenarios/
  I Think, We Think/Research handout (attached)
- Breakfast Club Character: Bookmark Cards (printed on a variety of colored card stock, cut and sorted into sets by colors) (attached)
- Breakfast Club Character: whole sheet (printed and left whole on a variety of colored card stock to match the bookmark strips) (attached)
- 3-2-1 Handout (attached)

Engage

Before Session

Game links should be sent to all participants one to two weeks before the session is held. Request that participants play 30 minutes of one or two games before the date of the session (provide a due date). These individual gaming experiences will create a more personal learning connection for each participant throughout the session. This session uses the tech tool Mentimeter, so slides 9 and 23 must be edited based on the code provided by Mentimeter.com once you have created your personal slides with the following questions: “Describe how to best engage students in their learning?" and "What instructional elements support engaged learning?" Make sure to set up the two slides as "Presenter Pace" (see image below).



On the top right side of the screen, click on "Configure," "General," and then "Presenter Pace." Also, to retrieve links to share results to the participants click on "Export and Share."

Presenter's Note

Have handouts and materials available on the table for participants. All participants should receive a copy of the **Agenda**, **Instructional Strategy Note Sheet**, and the **Classroom Scenarios/We Think, I Think T-chart/Research** handout Tables should be organized into small groups based on the games each participant played before the session, and each table should have the following handouts: **Comic Strips**, **Breakfast Club Character: Bookmark Cards** and whole sheet (matching colors at each table), **Breakfast Club Table Tents**, and "**DGBL Table Tents**. Participants use the DGBL Table Tents to determine where they sit for the session. This is strictly based on the game they played prior to the session. The Breakfast Club Table Tents will be place on the table also, but used later during the first Explain activity. Breakfast Club Character Bookmark Cards should be cut and organized prior to the session.

Display **slide 1** as participants arrive to the session. Using the DGBL Table Tents, participants sit according to the game they played prior to the session.

Change to **slide 2**. Welcome participants, and briefly introduce yourself and the professional development session.

Change to **slide 3**. Go over the session agenda, overarching objectives, and highlight the Instructional Strategy Note Sheet as a place to take notes on each strategy modeled during the session.

Use **slide 4** as a transition into the first activity for Meaningful Learning. Change to **slide 5** and ask participant to reflect on a meaningful learning childhood learning experience. Use the guiding questions on the PowerPoint to encourage participants to remember specific examples. Click the slide, and detail how participants will use the three frame comic strips on the table to illustrate this meaningful childhood learning experience. Provide time for them to draw and a few may share out their learning experience. Pose the question "Was this your typical learning experience or environment?"

Possible Responses

Drawings might demonstrate students working in collaborative groups, discussion groups or debates, investigations or experiences that connect to ideas or concepts that go beyond the classroom. These meaningful learning experiences or environments are expected to be different from our typical classroom experience (rows, teacher-centered, notes copied, read the chapter and answer questions, etc.) because they made a lasting impression. However, acknowledge that some might still have a meaningful learning experience in the traditional classroom, but maybe the teacher was exceptional at creating meaningful connections for the students at their individual level.

Change to **slide 6**, and share that this strategy, Cognitive Comics and the others modeled today can be located on the K20 LEARN Site. The interactive site is free and houses Lessons, Strategies, and Activities that are available for viewing and downloading.

Explore

Transition to **slide 7** and highlight that the next activity will focus on Connecting Motivation and Learning.

Change to **slide 8** and introduce the next strategy, I Used To Think, But Now I Know. Briefly highlight that this slide demonstrates the option to download and modify powerpoint slides for each instructional strategy. This is an excellent feature because each time a strategy is implemented there might be slight variations and this is an easy way to transfer those instructions and expectations to students or participants.

Transition to **slide 9**, requesting participants take the next two minutes to navigate to www.menti.com and use the code generated by Mentimeter to join and then answer the first question presented.

After two minutes, show the word cloud generated by Mentimeter. Participants may make notes about the ideas that they notice.

After two minutes, change to **slide 10**. Begin highlighting the research provided on slides 10 through **22**.

Presenter's Note

Do not just read the slides as they are, but understand the research from which these ideas and facts stem. Highlight the importance and impact of factors like Motivation, Engagement, and the Learning Environment so that your participants will better understand the connection to Game-Based Learning. All research is cited within the *Resources* section of this document.

Change to **slide 23** after the research has been highlighted and Game-Based Learning has been connected to Motivation, Engagement, and Learning Environment. Request participants to once again visit www.menti.com and enter the same code to access the second question on Mentimeter.

Presenter's Note

Presenter will need to click to the next question so participants may view and answer it at this time.

After two minutes, show the ideas generated on Mentimeter, and allow time for table talk or whole group discussion regarding the difference between what participants used to think, and what they now understand because of the research shared in this seession.

Change to **slide 24** and highlight the K20 LEARN Site again detailing that some strategies have videos demonstrating how the strategy has been used with students successfully in a classroom. Show the video if there is time in the presentation.

Explain

Transition to **slide 25**, highlighting that the next activity will focus on The Student & Learning. The student and their learning are deeply affected by motivation, engagement, and the learning environment. We are going to explore and explain this further in our next activity.

Change to **slide 26** and highlight the I Think, We Think instructional strategy. Briefly share the expected task before participants begin moving. This slide can stay on the screen until groups have found their Character tables, using the Breakfast Club Character Table Tents to determine their new table. Then change to **slide 27**. This slide clearly provides the remaining steps and the two questions participants should consider when writing their individual and group statements.

- Select one Breakfast Club Character Bookmark cards.
- Taking your bookmark, move to your Character's table (look for the Character Table Tents)
- Read the scenarios
- Individually write an 'I Think' statement answering the following questions: "What qualities within this environment promote motivation and engagement for this student?" and "What adjustments could be made to promote this student's motivation and engagement?"
- Character groups share their 'I Think' statements and use them to write a group 'We Think' statement
- Return to your original tables and share the 'We Think' statement with your table who had the other Breakfast Club Character Cards in the same color as yours.

Presenter's Note

Provide groups with verbal time reminders. For example, "If you have not started writing your "I Think" statement, please begin doing that now." and, "If your group has not started writing the "We Think" statement, please start that within the next minute."

Change to **slide 28** and instruct all participants to return to their original table (where participants sat at the start of the session). Once participants have returned to their original seats, they begin to share their "We Think" statements with the other participants who had the other four "Breakfast Club Character Cards" in the same color (these groups are will be mixed characters: Brian, Allison, John, Andrew, and Claire). After groups have had an opportunity to share within their groups, ask a few groups to share out a brief report of what was discussed to the whole group.

Possible 'we Think' Statements

"We think that John will be more motivated and engaged in the Mrs. Martinez's classroom because there is a less rigid structure and his rebellious nature might have less to push against. He also might be more likely to reform his behaviors because of peer pressure since group work is expected in class and he has the freedom to choice assignments and approaches to learning content." "Brian would be more comfortable in Mr. Smith's classroom because there he is in control of learning the content provided by the teacher. He knows exactly what to expect and what is right or wrong, thus making adjustments as needed. However, in Mrs. Martinez's class, Brian might actually learn more because he will be pushed to become an independent thinker and learn to generate questions and rationalizations that aren't just provided by someone else. He might develop his own understanding and learn from trial and error. He might develop a growth mindset, learning to see mistakes as beautiful learning opportunities and not as failure." "Allison would have the freedom to express herself in Mrs. Martinez's class. Where as in Mr. Smith's class she might be a wallflower blending in with the majority of the class, never having the the opportunity to have the choice to express her own independent thinking or creativity." "Andrew and Claire might have be able to hide in a class like Mr. Smith's allowing the Brian's of world answer all the questions for them, but in Mrs. Martinez's class they would have the opportunity to develop their socializing in a new form for academia. They both might struggle as first, but with the guidance of a teacher like Mrs. Martinez, they would soon increase the rigor and relevance of their academic conversation."

Character Bookmark Colors And Copies

If you have 100 people make 20 copies of the Character Bookmark cards using 20 different colors of paper/card stock. (i.e. light and dark colors of the following: green, blue, purple, red, pink, yellow, orange, gray/white, tan/ivory, teal/salmon)

Use **slide 29** to transition to the Learning Experience. Change to **slide 30**. This activity provides the opportunity for participants to link and explain how Game-Based Learning supports the challenge of meeting a variety of students' needs and learning styles. Participants first share their own experience with the game play assigned.

Presenter's Note

If all or at least the majority of participants played the online games assigned, then participants will focus the topic of discussion on synthesizing what they learned about their game play experiences and how that might translate to two of the five Breakfast Club Characters. If the majority of participants did not play any of the games then provide highlights of one of the games so they may have a common understanding of at least one game. Note that this time should be used primarily to reflect, connect, and explain how game play impacts a variety of student characteristics. Game play highlights should not dominate discussion time.

Change to **slide 31**. Table groups identify two characters from the whole sheet of Breakfast Club Characters (same color as their bookmark cards) and discuss how Game-Based Learning could meet the needs of these students specifically.

Possible General Connections

It is not about the game itself, but what the game does for the learner and the learning environment. Not all games are created equal. Use data about the game and game play to further instruction after game play and experience. Failure in games is okay, that is part of the learning process and building a growth mindset. *(NOTE: These are hidden on slide 32)*

Extend

Use **slide 33** to transition to Preparing to Advocate. Now that participants have had an opportunity to connect and explain their individual and collective understanding of Game-Based Learning (online or hands-on), they extend understanding to implementation and next steps beyond the session.

Change to **slide 34**. Explain these are helpful resources you can use as you prepare to advocate (see slide and Agenda for details regarding resources).

Change to **slide 35** and introduce the instructional strategy, 3-2-1. The next slide is downloaded and edited from the LEARN site using the PowerPoint Template for this specific instructional strategy.

Change to **slide 36**. Clicking through this slide, provide a few minutes for participants to reflect and record their answers/thoughts on the provided half sheet of paper labeled "3-2-1."

- Identify three potential stakeholders (teachers, department chairs, administrators, etc.) who you could approach to share the benefits of using Game-Based Learning experiences to support learning.
- Generate two statements that succinctly describe the value of GBL.
- Think of one potential barrier stakeholders might have in using GBL and begin to consider strategies to overcome possible challenges.

If time allows, participants may popcorn out what they recorded for these items.

Possible Responses

Potential stakeholders: administrators, district leaders, parents, students, and other teachers (mindset and paradigm shift); community/business leaders (donations for resources and influence policy)

Value of GBL: Failure in games is okay, that is part of the learning process and they develop growth mindset. Researchers have found that GBL facilitates intrinsic motivation and student interest due to the novelty of the learning experience (Huang, 2011).

Potential barrier and strategies to overcome: Funding, contact the community business leaders with a proposal that is supported by research. Or the mindset of others within the school/district; viewed as another thing to learn and implement that will eventually fade out so why change now. Again, create a proposal supported by research then pilot a program with select teachers willing to try and make the change through integration and evidence supported by the success of students within their own site.

Evaluate

Ask participants to think about the most significant point of the session. You can do this by starting with a review of the topic and then posing a question, like, “What point made during today’s session helped you understand the importance of promoting game-based learning?” Have them either share this point out loud or write it down. Collect participants responses. Analyze responses and use them as necessary during the follow up reflection session.

Research Rationale

Resources

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