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Gamification Techniques ANY Instructor Can Use to Engage, Assess, and Energize Students



The 22nd Annual Midwest Institute for

Goals:

1. Define Gamification and expand your thinking about games

2. Provide a variety of examples of how games can be used in the (psychology) classroom

3. Give you tools/inspiration for designing your own games

What is Gamification?

Using the principles of **game mechanics** to engage people, motivate action, and promote learning.

Gamification (in education) should not be confused with:

- **Gamification for Business/Profit**
- Digital Game-Based Learning (DGBL):
 - Instructional Games
 - Serious Games
 - Scenario-based games

Gamification is “big business” for business

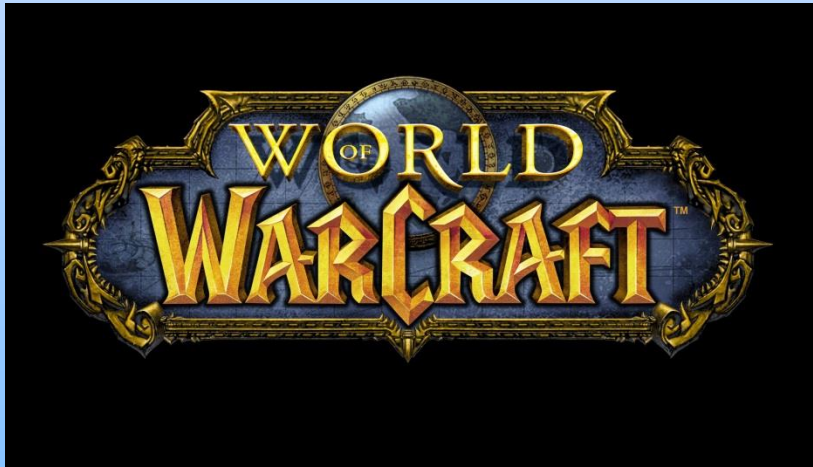
- Customer loyalty
- Brand Awareness
- Employee Motivation
- Customer Engagement
- Recruitment
- Goal Tracking



- Costly software/products/consultants
- Competition oriented (e.g. use of leaderboards)

Gamification (in education) should not be confused with:

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 - Instructional Games
 - Serious Games
 - Scenario-based games



Virtual Simulations Help Train Psychologists, Psychiatrists

By RICK NAUERT PHD *Senior News Editor*

Reviewed by John M. Grohol, Psy.D. on August 6, 2012 ~ 1 min read

Following on the heels of flight simulation training, medical simulation and now virtual mental health simulations train health professionals by realistically mimicking patient symptoms.

New simulators mimic the symptoms of a patient with clinical psychological disorders, according to new research presented at the American Psychological Association's 120th Annual Convention.

"As this technology continues to



Effectiveness of GBL in Higher Education

(see Meta-Analyses by Girard et al., 2013; Li & Tsai, 2013; and Sitzmann, 2011)

Results for student learning **are mixed**. Some of the factors that moderate the effectiveness of computer-based games over traditional methods are:

- The **type of game**
- Whether the game was a **supplement or replacement** to other instructional methods
- Whether the computer game is **compared to active or passive** traditional methods

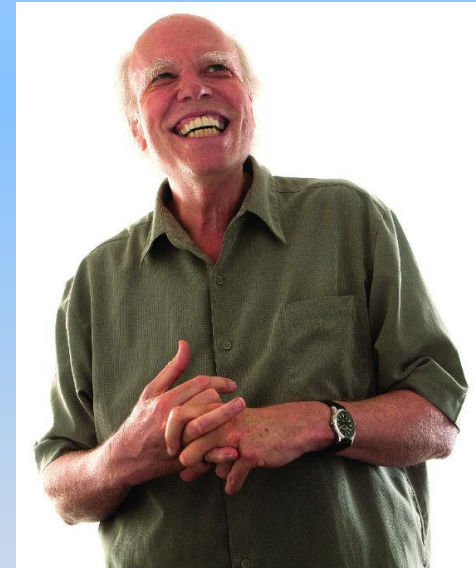
Barriers: Finding a game, risks w/online games, resources

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Party games
Ice breakers
Conversation games
Drinking games
Guessing games
Board games
Card games
Dice games
Role-playing games
Strategy games

Cooperative games
Narrative games
Mystery games
Word games
Team games
Outdoor games
Solitaire games
Puzzles
Skill games
Travel games

“[gamification] neither implies nor precludes the use of games or game-like activities but inherently and more importantly **shifts the focus** from the **actual game** to the **gameplay elements** and **principles of learning** found **within.**”



James Paul Gee

Gee, J. P. (2008). *What video games have to teach us about learning and literacy*. Basingstoke: Palgrave Macmillan.

Everything works..... or does it?

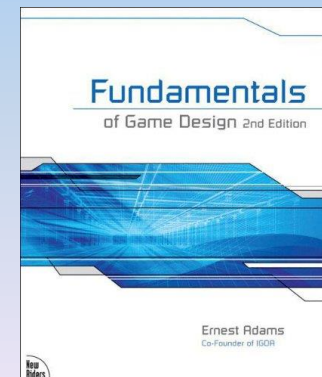
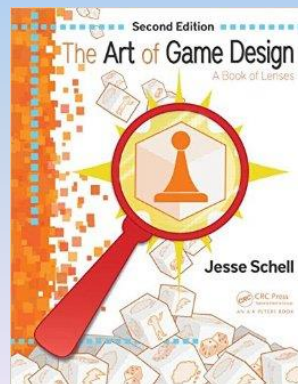
Cooperative Learning
Group Discussions
Service-Based Learning
Pop Quizzes
Experiential Learning
Presentation Software
Advance Organizers
Audience Response Systems
Podcasting
Active Learning
Blogs
Student-Conducted research
Wikis
Self-Study
Peer Evaluation
Case Studies
Collaborative Learning

Structured Reflection
Micro-Activities
Storytelling
Interleaving
Just-in-time teaching
Concept mapping
Role Playing
Flipped Classroom
Practice Testing
Gamification



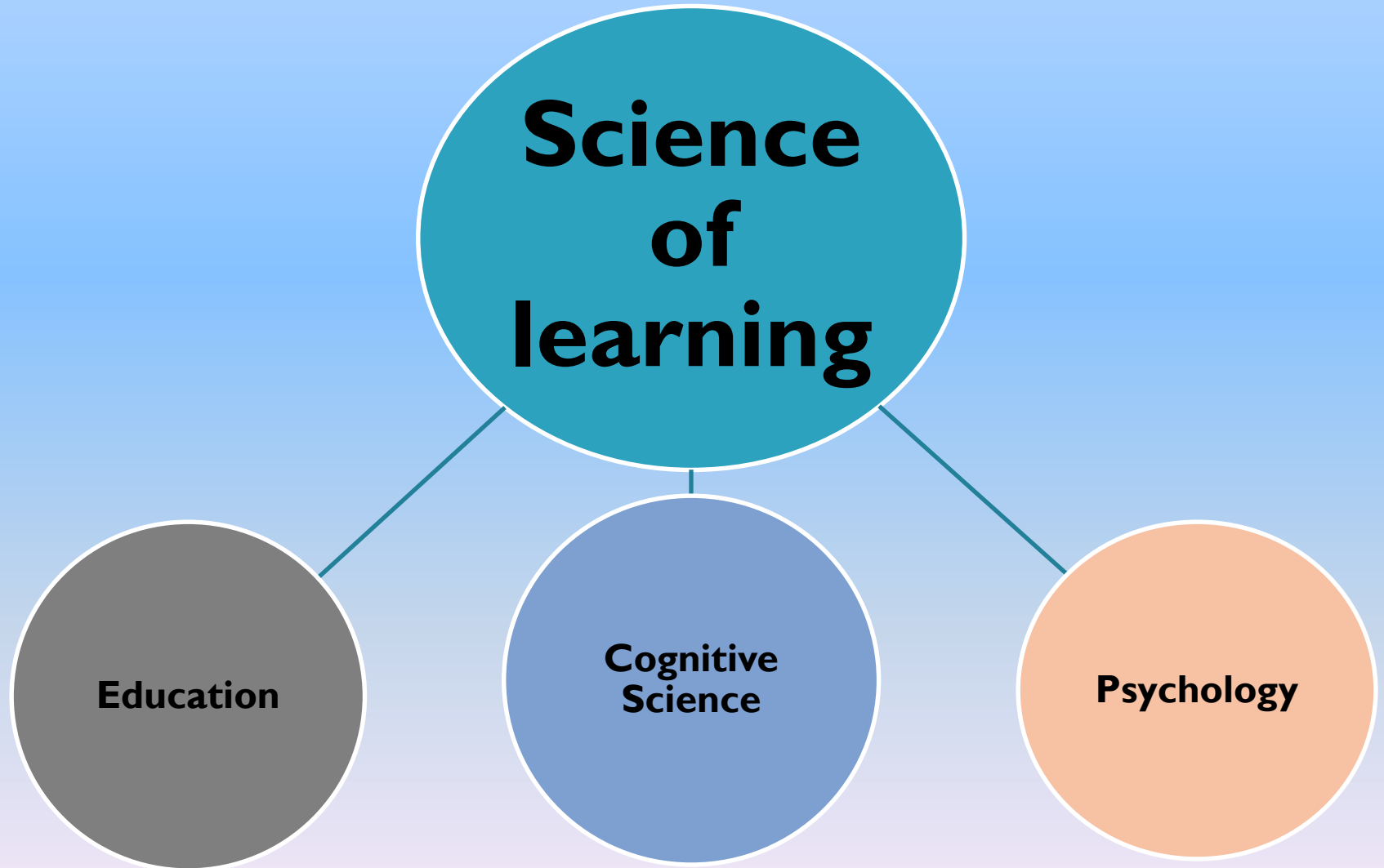
Games often include a combination of the following elements:

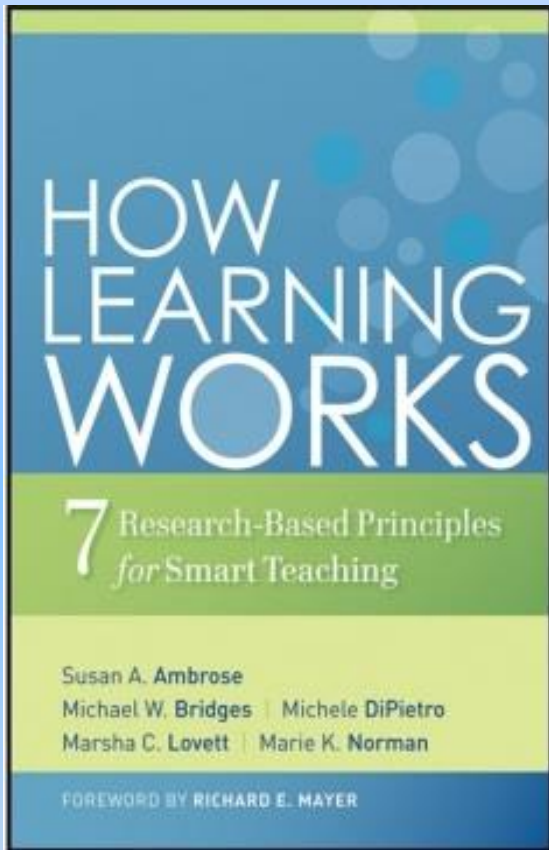
- Individual control
- Positive and negative feedback
- Careful balance of reward/challenge
- Cognitively stimulating
- Motivating and Fun



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The game should be consistent with the science of learning...





- 1) Student's prior knowledge can help or hinder learning
- 2) Organizing knowledge is important to learning
- 3) **Motivation** influences learning
- 4) to develop mastery students need **practice** and application
- 5) targeted **feedback** is important to learning
- 6) **social and emotional** classroom climate is important to learning
- 7) to be **self-directed**, students must **monitor their learning** and adjust.

8 Cognitive Principles of Learning (Marin, 2014)

- 1) Learners have short **attention spans**
- 2) Learners are **visual processors**
- 3) Learners are easily overloaded
- 4) Learners must connect to the past
- 5) Learning is tied to **emotion**
- 6) Learners need distributed **practice**
- 7) Learners need **feedback**
- 8) Learners benefit from practice testing

Marin, A. (2014). Teaching with the brain in mind: What Neuroscience can (and cannot) tell us about how students learn. *The Cross Papers, Number 17*, League for Innovation in the Community College.

Goals:

1. Define Gamification and expand your thinking about games

2. Provide a variety of examples of how games can be used in the (psychology) classroom

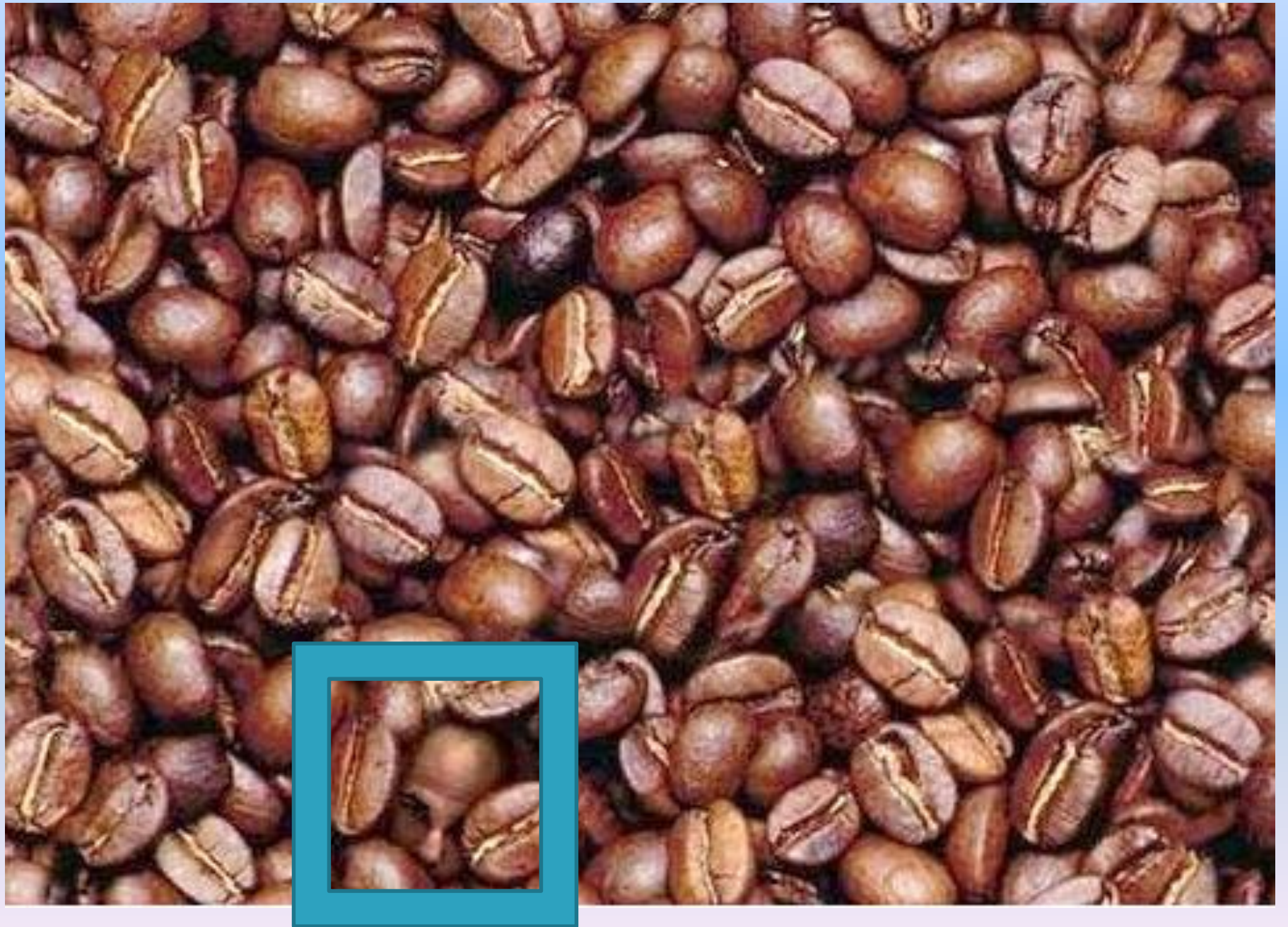
4. Give you tools/inspiration for designing your own games

The Educational Goal/Purpose:

- 1) Engagement
- 2) Social
Interaction/Collaboration
- 3) Content Delivery
- 4) Content Mastery/Application
- 5) General Education Outcomes
- 6) Feedback/Assessment

Can you find the face?





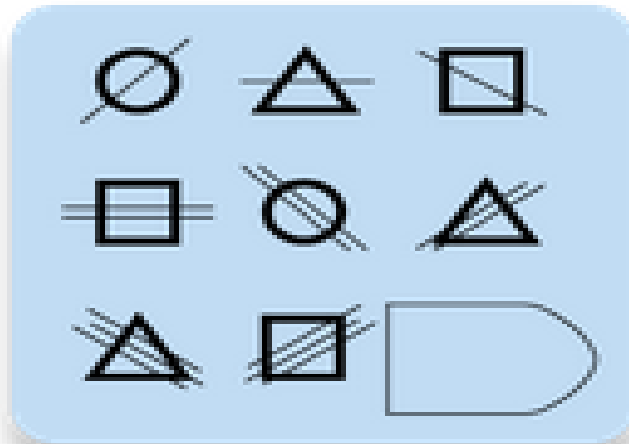
What's wrong with this picture?



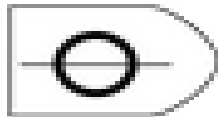
Psychology

Amy Marin | Roger Hock

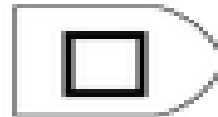
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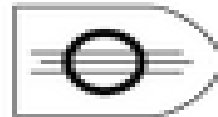
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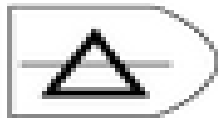
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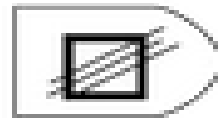
6



7



8



Games are naturally motivating because they touch on basic human motives:

- **Drive to personalize**
- **Innate curiosity**
- **Desire to overcome challenges**

Koepp, M. J., Gunn, R. N., Lawrence, A. D., Cunningham, V. J., Dagher, A., Jones, T., Brooks, D. J., and Grasby, P. M. (1998). Evidence for striatal dopamine release during a video game. *Nature* 21, 266–268.

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“Engaging” Game Mechanics:



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The Educational Goal/Purpose:

1) Engagement

2) Social

Interaction/Collaboration

3) Content Delivery

4) Content Mastery/Application

5) General Education Outcomes

6) Feedback/Assessment





What's on my back?





The Educational Goal/Purpose:

- 1) Engagement
- 2) Social Interaction/Collaboration
- 3) Content Delivery
- 4) Content Mastery/Application
- 5) General Education Outcomes
- 6) Feedback/Assessment

Characteristics of Pseudoscience

Although, on the surface, it may seem difficult to tell the difference between a true science and the many false ones out there, pseudosciences generally can be identified by the following characteristics:

- **Lack of legitimate training:** There is a lack of legitimate courses or training in the field. There are no accredited or widely accepted university degrees in the field. A person can label themselves as an expert or practitioner without any formal training.
- **Untestable claims:** Pseudosciences rarely offer specific definitions, or measurements that could be tested and repeated by other researchers. For example, how could anyone scientifically measure or test the effects that stars have on our lives?
- **Use of misleading language:** Pseudosciences use technical-sounding but meaningless jargon meant to convince people of their credibility. Often these pseudoscientific terms are made up or used incorrectly, misleading the public.
- **Reliance on testimonials and anecdotal evidence:** You've probably seen an infomercial or heard an advertisement for a psychic in which satisfied customers gush about how the psychic changed their lives. Mainstream sciences avoid personal testimonials precisely because one person's experiences may *not* be usual or typical of most people and it's easy to be fooled that something was effective when the result was mere coincidence (Herbert et al., 2000).
- **Failure to replicate:** Pseudoscientists often refuse to share their methods or data with other scientists, making it impossible to test or reproduce their research findings. Good scientists are used to having their work "peer reviewed" (analyzed and reviewed by other scientists) and welcome replications. In contrast, pseudoscientists will often refuse to allow their work to be reviewed by anyone else; they keep it *secret*, which is the antithesis of science.
- **Absence of change or progress:** In most sciences, theories and ideas change with time, as more and more information is collected. Pseudoscientific beliefs tend to be fixed over time; very little change occurs despite decades of existence. Astrology, for example, hasn't changed fundamentally in the last 2,000 years (Himes, 1988). Science moves us forward in our understanding of the world; pseudoscience is static.
- **Well marketed and costly:** Pseudosciences are often used for profit and can be seen in infomercials and advertisements. One review of the pseudoscience called "energy psychology" found that purchasing a complete online training program for one aspect of the belief, called "thought field therapy" (whatever that is), could cost users upwards of \$100,000 (McCaslin, 2009)!

Dry handout listing criteria for recognizing pseudoscience ... BORING!



Jacqueline Stallone
Astrologer/Psychic
 jackie@jacquelinestallone.com
 P.O. Box 1680
 Santa Monica, CA 90406
 tel: (310) 393-0494
 fax: (310) 451-8989

RUMPOLOGY REPORT

An International Female Athlete

Rumpology

TOTAL Rumpology Report.

This report covers all aspects of rumpology -- an analysis of the LEFT cheek (your past) the Right Cheek (your future) and the Gluteal Cleft, (your natural personality characteristics).

Price: \$600.00

LEFT Cheek Rumpology Report. This report focuses on your left rump cheek, that part of your derriere that describes your past. It helps you understand where you are coming from and the things in your past that motivate your actions in the present.

Price: \$300.00

RIGHT Cheek Rumpology Report. This report focuses on your Right rump cheek, that part of your derriere that describes your future It helps you understand if your plans will take you "ass backwards" and mar your future by revealing your natural inclinations and tendencies.

Price: \$300.00

GLUTEAL CLEFT Rumpology Report. This report helps you understand who you are, your natural personality and tendencies. When you learn to "know thyself", you are capable of taking advantage of all of life's opportunities because you understand why some of them appeal to you, and why some of them do not.

Price: \$250.00

THE DOCTORS



**“Rumpology” episode
on *The Doctors* TV
show.**

FLAT



- Confident
- Smart
- Career-Driven

HEART



- Emotional
- Sensitive
- Helpful

BOYISH



- Happy-Go-Lucky
- Fun
- Confident

ROUND



- Open
- Honest
- Sincere

UPSIDE-DOWN HEART



- Moody
- Shy
- Emotional

TEAM MEMBER NAMES: _____

SCAVENGER HUNT: Is *Rumpology* a Pseudoscience?

Instructions: Using your phone, laptop, and/or handouts provided by the instructor, gather information and answer the following questions to determine whether *Rumpology* is a legitimate practice or a pseudoscience. When you've found all the information, ring your buzzer!

Characteristics of Pseudoscience

Although, on the surface, it may seem difficult to tell the difference between a true science and the many false ones out there, **pseudosciences** generally can be identified by the following characteristics:

- **Lack of legitimate training:** There is a lack of legitimate courses or training in the field. There are no accredited or widely accepted university degrees in the field. A person can label themselves as an expert or practitioner without any formal training.
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TEAM MEMBER NAMES: _____

CRITICAL THINKING: Is *Rumpology* a Pseudoscience?

Instructions: Using your phone, laptop, and/or handouts provided by the instructor, gather information and answer the following questions to determine whether *Rumpology* is a legitimate practice or a pseudoscience.

- 1) What is *Rumpology*? What do *rumpologists* claim they can tell you during a reading?

- 2) How does one train to become a *rumpologist*? Can you find a legitimate course in *rumpology*? Can you earn a degree in *rumpology*? How many *rumpologists* exist worldwide?

- 3) RESEARCH: Is *rumpology* based on scientific research? Can you locate a legitimate research article on *rumpology*? (Hint: Use Google Scholar and search keyword "*Rumpology*")

- 4) You received a handout listing the characteristics of pseudoscience. Does *rumpology* meet any of these criteria? Give specific examples from your reading.

Rumpology Information



Recommended Website:

www.jacquelinestallone.com/rumps.html

Recommended Youtube Videos:

["Rumpology" The Doctors \(4:07 min\)](#)

[Rumpologist Sam Amos on This Morning \(2:31 min\)](#)

Handout on Criteria for determining whether something is a pseudoscience

Question the students must answer as a team

Packet of articles, suggested websites and youtube videos.

The Educational Goal/Purpose:

- 1) Engagement
- 2) Social Interaction/Collaboration
- 3) Content Delivery
- 4) Content Mastery/Application
- 5) General Education Outcomes
- 6) Feedback/Assessment

Team Number _____

#1 – Pottying Puppy

Every time the puppy urinates in the house, the owner hits the dog with a newspaper. When hit, the puppy cries out in fear. Now simply the sight of the newspaper causes the puppy to cry.

Unconditioned Stimulus (UCS): _____

Unconditioned Response (UCR): _____

Conditioned Stimulus (CS): _____

Conditioned Response (CR): _____

Team Number _____

#2 – Musical Ice-Cream

Kaitlyn gets excited about eating ice cream. Whenever the ice-cream truck comes down the street playing music, Kaitlyn gets excited to purchase and eat an ice-cream cone. Now when she hears the music coming down the street, she gets excited in anticipation.

Unconditioned Stimulus (UCS): _____

Unconditioned Response (UCR): _____

Conditioned Stimulus (CS): _____

Conditioned Response (CR): _____

Team Number _____

#4 – Water Show

At a recent water show, temperatures exceeded 100 degrees. As Jeanne and her fellow skiers perform taxing routines to the blaring organ music, she got more and more uncomfortable. Eventually, she fainted from the heat. After the outbreak, she can again hear organ music without feeling a little dizzy.

Unconditioned Stimulus (UCS): _____

Unconditioned Response (UCR): _____

Conditioned Stimulus (CS): _____

Conditioned Response (CR): _____

Team Number _____

#5 – Captain Hook

Captain Hook had a nasty encounter with a crocodile in never-never land. As a result of the battle, he lost his hand to the croc, which also swallowed an alarm clock. Fortunately for Hook, the loud ticking warned him of the hungry croc's approach. Unfortunately for Hook, any clock's ticking now ushers in a full-blown anxiety attack.

Unconditioned Stimulus (UCS): _____

Unconditioned Response (UCR): _____

Conditioned Stimulus (CS): _____

Conditioned Response (CR): _____

Team Number _____

#3 - The Trouble With Tuna

Brian was really looking forward to lunch. His mother prepared a tuna sandwich. Unfortunately, the mayonnaise she used had been left out too long. After eating, Brian felt extremely nauseated and had to rush to the bathroom. The mere mention of a tuna sandwich would send Brian scurrying to the bathroom with a rolling stomach.

Unconditioned Stimulus (UCS): _____

Unconditioned Response (UCR): _____

Conditioned Stimulus (CS): _____

Conditioned Response (CR): _____

Team Number _____

#6 – Troublesome Shower

Martin likes to take a shower in the locker room after working out. During one such shower, he hears someone flushing a nearby toilet. Suddenly, boiling-hot water rushes out of the shower head, causing Martin serious discomfort. As he continues the shower, he hears another toilet flush and immediately jumps out from under the shower head.

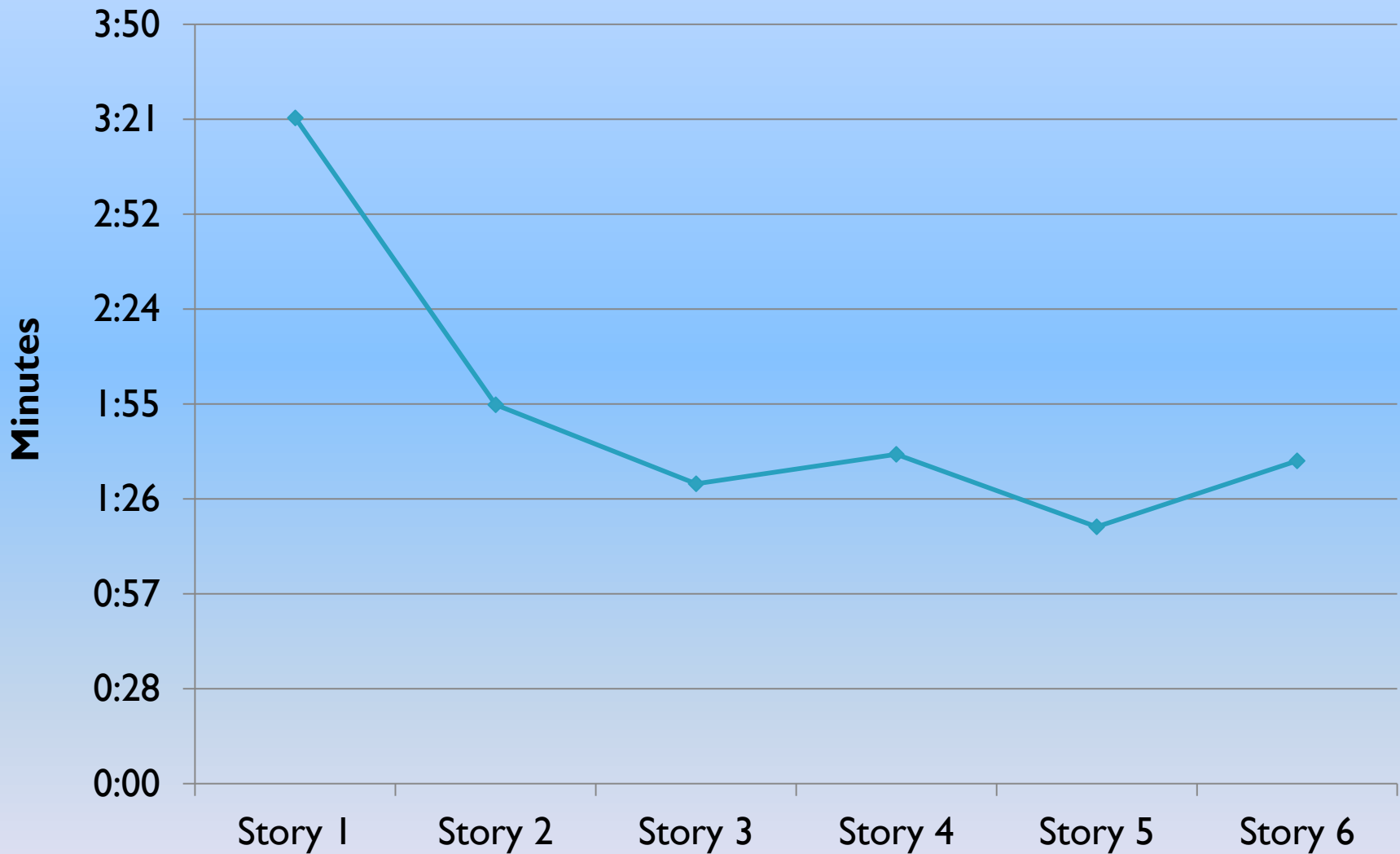
Unconditioned Stimulus (UCS): _____

Unconditioned Response (UCR): _____

Conditioned Stimulus (CS): _____

Conditioned Response (CR): _____

Classical Conditioning Game



N = 80 teams (3-5 students per team in 10 sections of PSY101)

The Educational Goal/Purpose:

1) Engagement

2) Social

Interaction/Collaboration

3) Content Delivery

4) Content Mastery/Application

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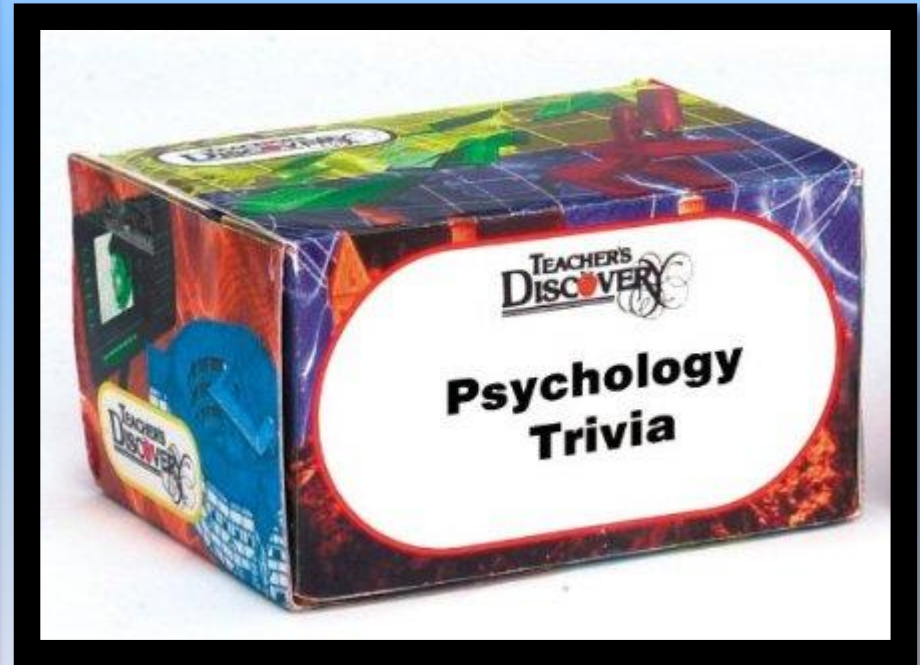
The 22nd Annual Midwest Institute for

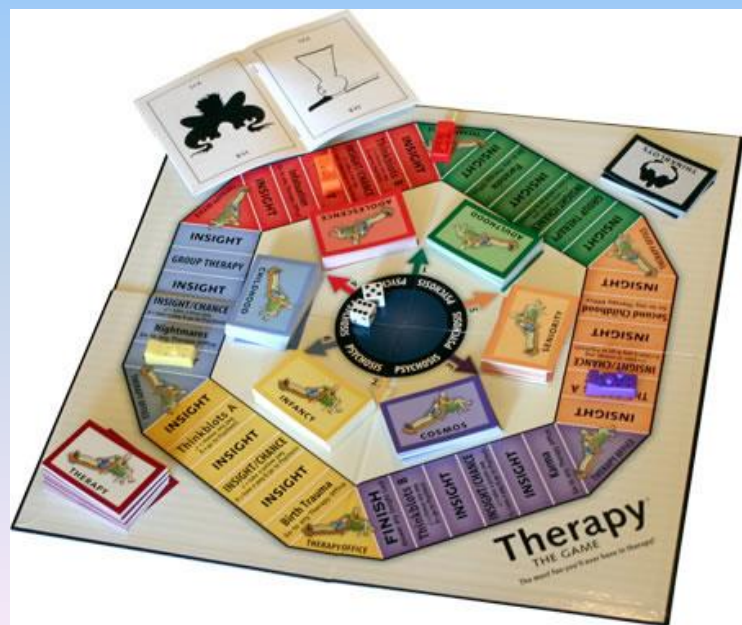
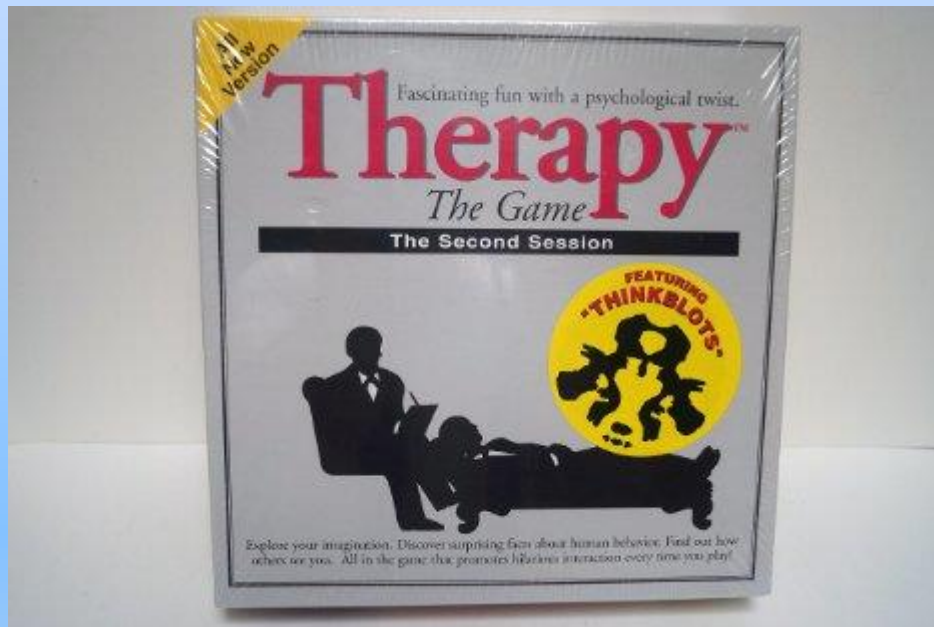


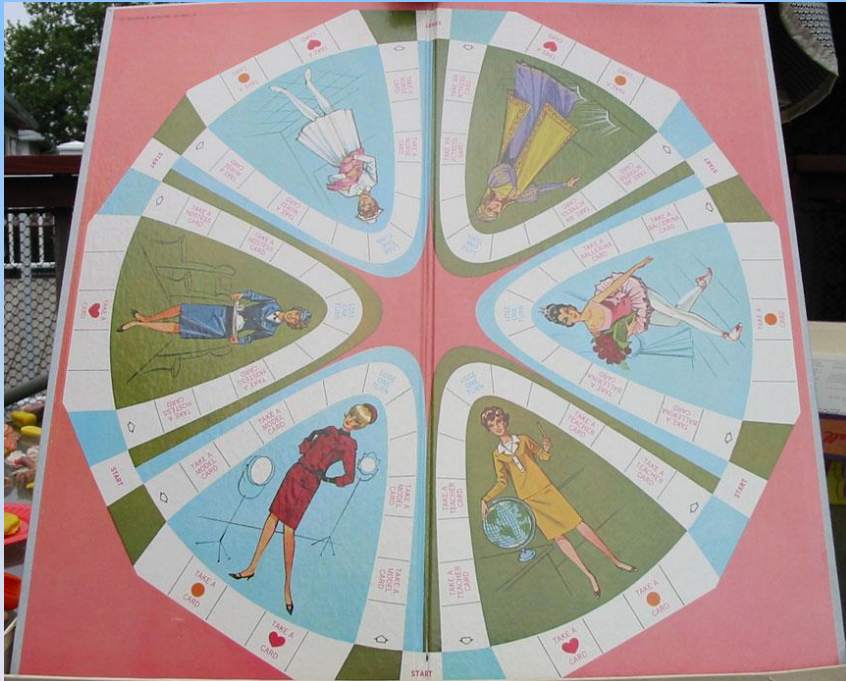
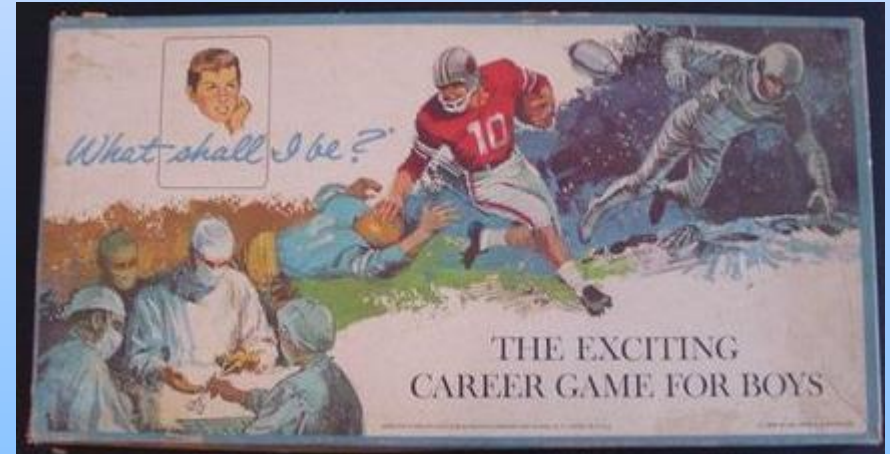
In support of the MCCCDC General Education Statement, five general education areas are assessed at Phoenix College:

- **Critical Thinking** - Students will be able to apply critical thinking skills to solve problems, make informed decisions, and interpret events.
- **Information Literacy** - Students will recognize when information is needed, identify appropriate types of information, and locate, evaluate, and use information effectively, ethically, and legally.
- **Numeracy** - Students will use numerical concepts and data effectively.
- **Oral Presentation** - Students will plan and deliver an oral presentation to a target audience at a satisfactory level.
- **Writing** - Students will use writing skills to communicate effectively.

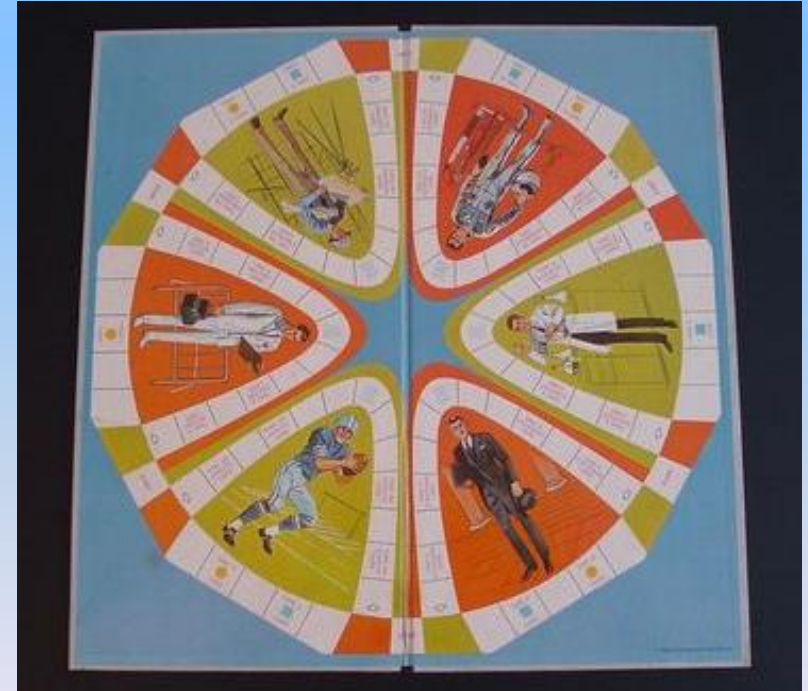
COTS for Critical Thinking



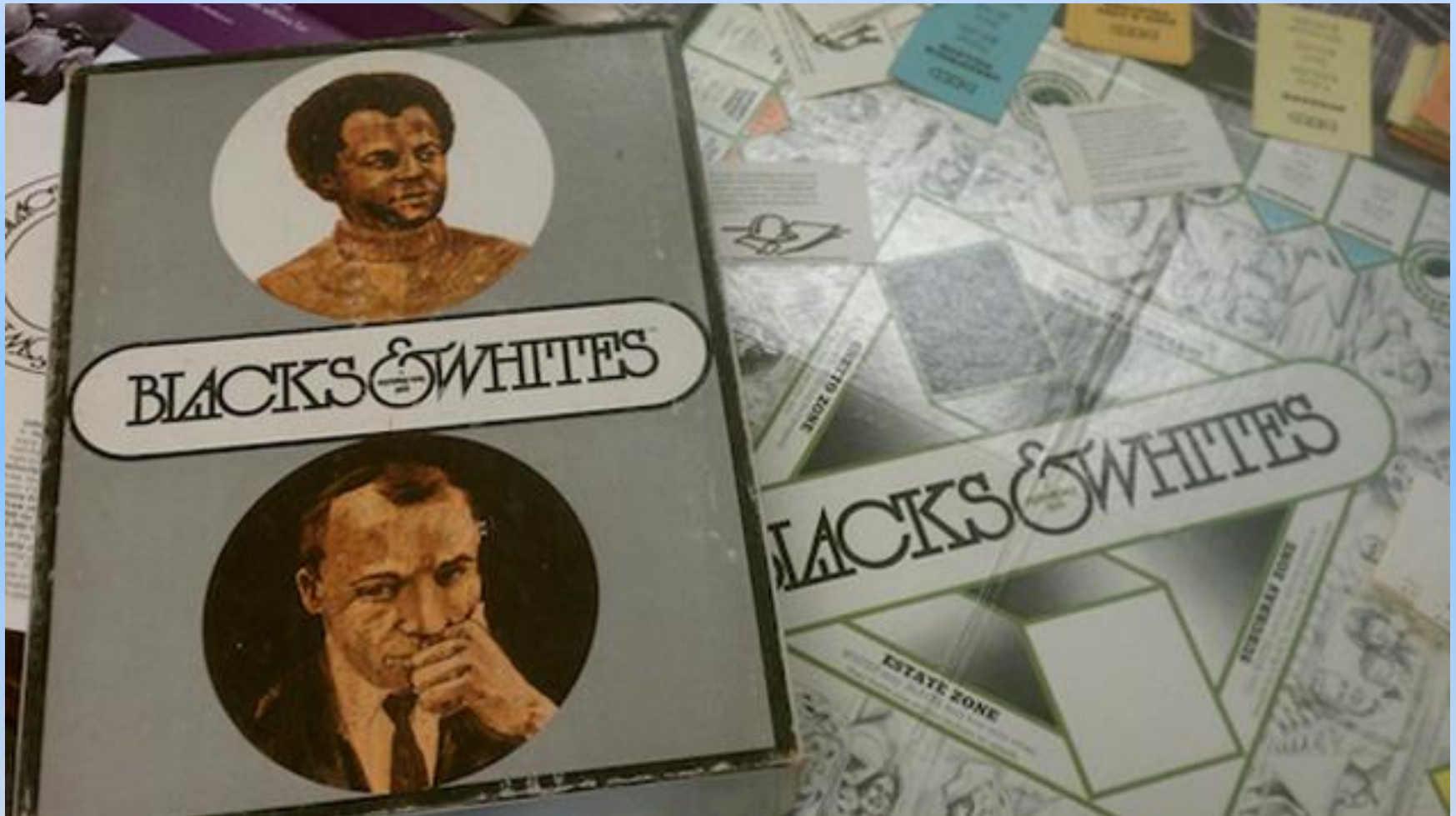




Options: Charm school for modeling, nurse, actress, teacher, ballet dancer



Options: Scientist, doctor, athlete, engineer, astronaut.



'Blacks & Whites' (1970) *Psychology Today*

Stereotyping, prejudice, discrimination, social roles, intergroup conflict, social comparison, traditional racism vs. modern racism.

The Educational Goal/Purpose:

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“games can constantly assess the learner’s ability from the moment they start playing to the moment they stop; this is a promise few other pedagogic tools can deliver on.”

Nick Tannahill , *Aston University*

Tannahill, N., Tissington, P. and Senior, C. (2012). Video games and higher education: what can “Call of Duty” teach our students? *Front. Psychology*, **3**, 210. doi: 10.3389/fpsyg.2012.00210

learning | catalytics

A “bring your own device” student engagement, assessment, and classroom intelligence system.



1) Could I use *Learning Catalytics* as a way to deliver games?

2) Could I use this technology for assessment purposes?

*** Assessment of teaching**

*** Assessment of student engagement**

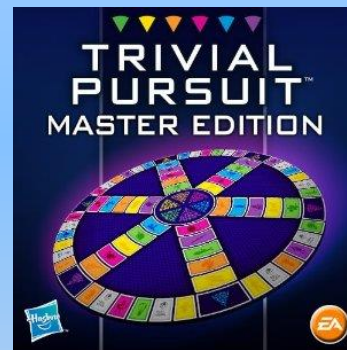
*** Assessment of student learning**

In-Class Exam Review Session

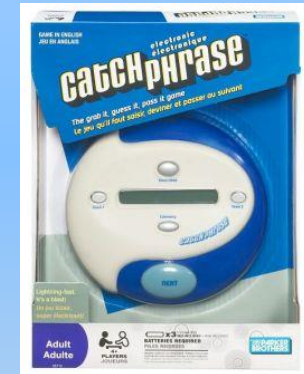
Act it out!



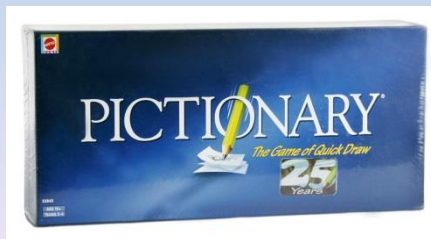
Answer it!



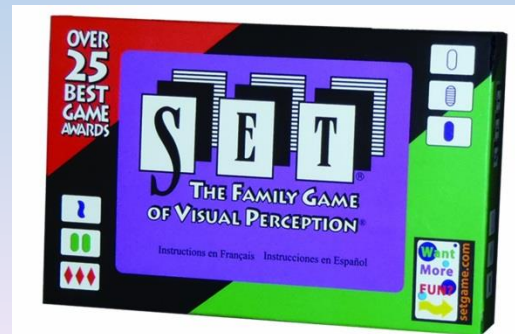
Describe it!



Draw it!



Recognize it!



Sculpt it!



[My Courses](#) > [Introduction to Psychology](#) > **PSY101 Game Review - Exam #2**

Questions

Format	Question	Points	
1. multiple choice	ANSWER IT! The inability to smell is called:	1	⚙️
2. slide	DRAW IT! BOBO DOLL Hint: The bobo doll was the inflatable clown used i...	0	⚙️
3. slide	SCULPT IT! IMPRINTING Hint: Conrad Lorenz studied imprinting in Geese....	0	⚙️
4. multiple choice	ANSWER IT! some information in our fleeting _____ is encoded int...	1	⚙️
5. slide	DESCRIBE IT! Self-Awareness Hint: Usually in the second year of life, i...	0	⚙️
6. short answer	RECOGNIZE IT! Which infant reflex is being depicted here?	1	⚙️
7. multiple choice	ANSWER IT! What was SALIVATION in Pavlov's experiment?	1	⚙️
8. slide	ACT IT OUT! ANOSMIA Hint: Anosmia is the inability to smell.	0	⚙️
9. slide	DRAW IT! RELATIVE SIZE Hint: Relative size is one of the monocular cue...	0	⚙️
10. slide	SCULPT IT! LINEAR PERSPECTIVE Hint: This is a monocular cue for depth....	0	⚙️
11. composite sketch	RECOGNIZE IT! Whether you see a snail or an elephant in this picture depen...	0	⚙️
12. many choice	ANSWER IT! Perceptual constancies include which of the following?	1	⚙️
13. slide	DESCRIBE IT! GENERALIZATION Hint: Generalization is a term Pavlov used...	0	⚙️
14. short answer	RECOGNIZE IT! Which perceptual constancy is illustrated here?	1	⚙️
15. multiple choice	ANSWER IT! _____ memories are said to linger in the mind fo...	1	⚙️
16. slide	ACT IT OUT! Color Blindness Hint: Color blindness is the inability to ...	0	⚙️
17. slide	DRAW IT! VISUAL CLIFF Hint: The visual cliff is a special table design...	0	⚙️
18. slide	SCULPT IT! OPTIC NERVE Hint: This optic nerve exits the back of the ey...	0	⚙️
19. multiple choice	ANSWER IT! You are drinking a strong cup of coffee that is particularly bi...	1	⚙️
20. short answer	RECOGNIZE IT! Which Gestalt law of grouping is illustrated here?	1	⚙️
21. slide	DESCRIBE IT! CUTENESS RESPONSE Hint: We have a tendency to respond to ...	0	⚙️
22. long answer	ANSWER IT! When you get out of the car at your friend's house, you smell a...	0	⚙️
23. slide	DRAW IT! GRASPING REFLEX Hint: Infants are born with the reflex to gri...	0	⚙️

Students worked in teams of 3-4 with a minimum of one device per team.



Session 33926645

slide question

DRAW IT!

RELATIVE SIZE

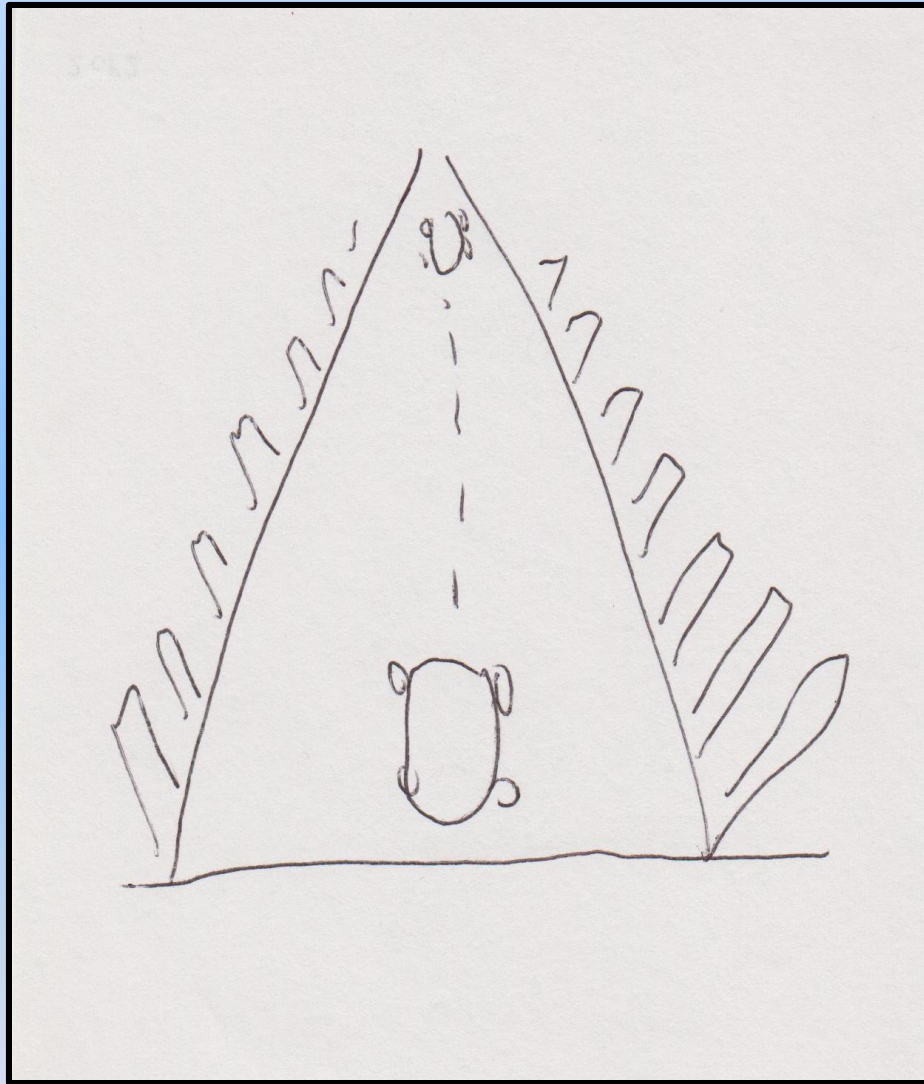
Hint: Relative size is one of the monocular cues for depth. Objects further away appear smaller than objects close up.

 [Refresh](#)

[Send a message to the instructor](#)

 [Join another session](#)





Student Drawing of “Relative Size”

Session 33926645**slide question**

SCULPT IT!

IMPRINTING

Hint: Conrad Lorenz studied imprinting in Geese. He found that baby geese "attach" to their mothers shortly after hatching and from that point will follow her wherever she goes.

Book Definition: the process by which certain animals form attachments during a critical period very early in life.

[Refresh](#)[Send a message to the instructor](#)[Join another session](#)





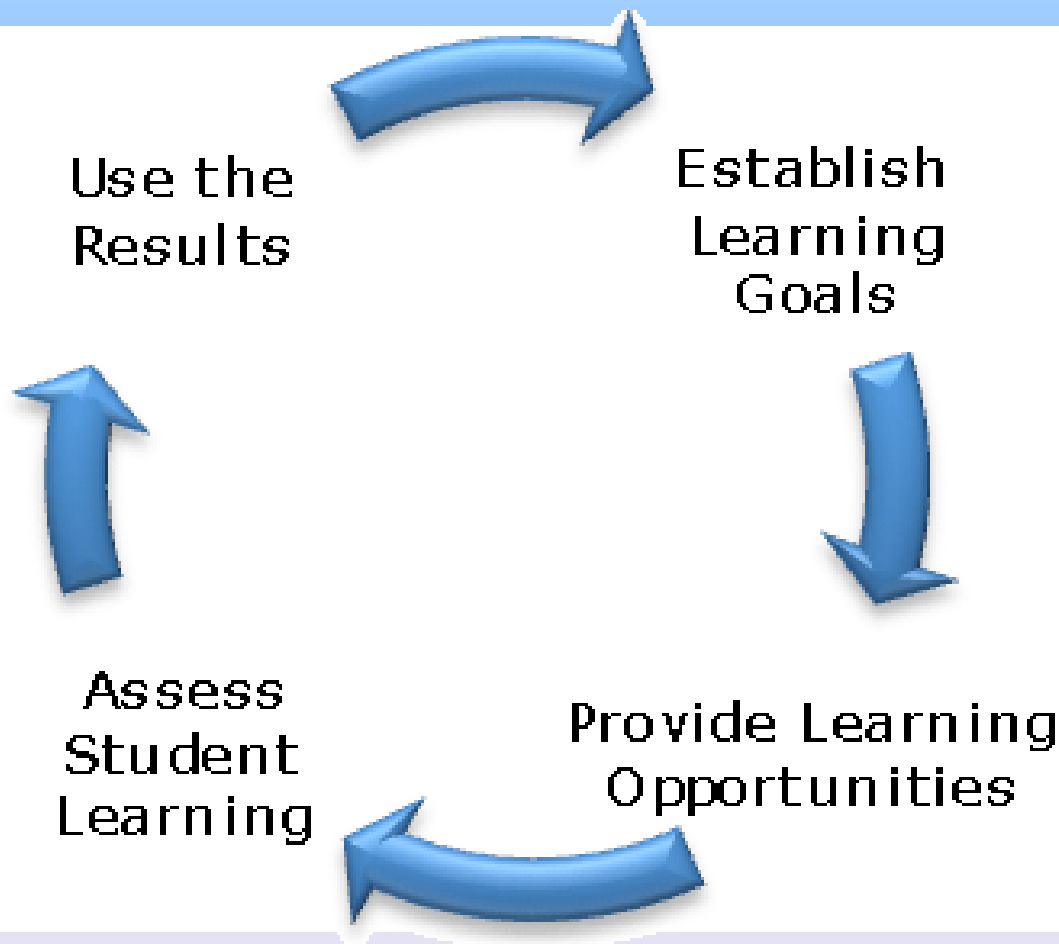
Student sculpting “imprinting”



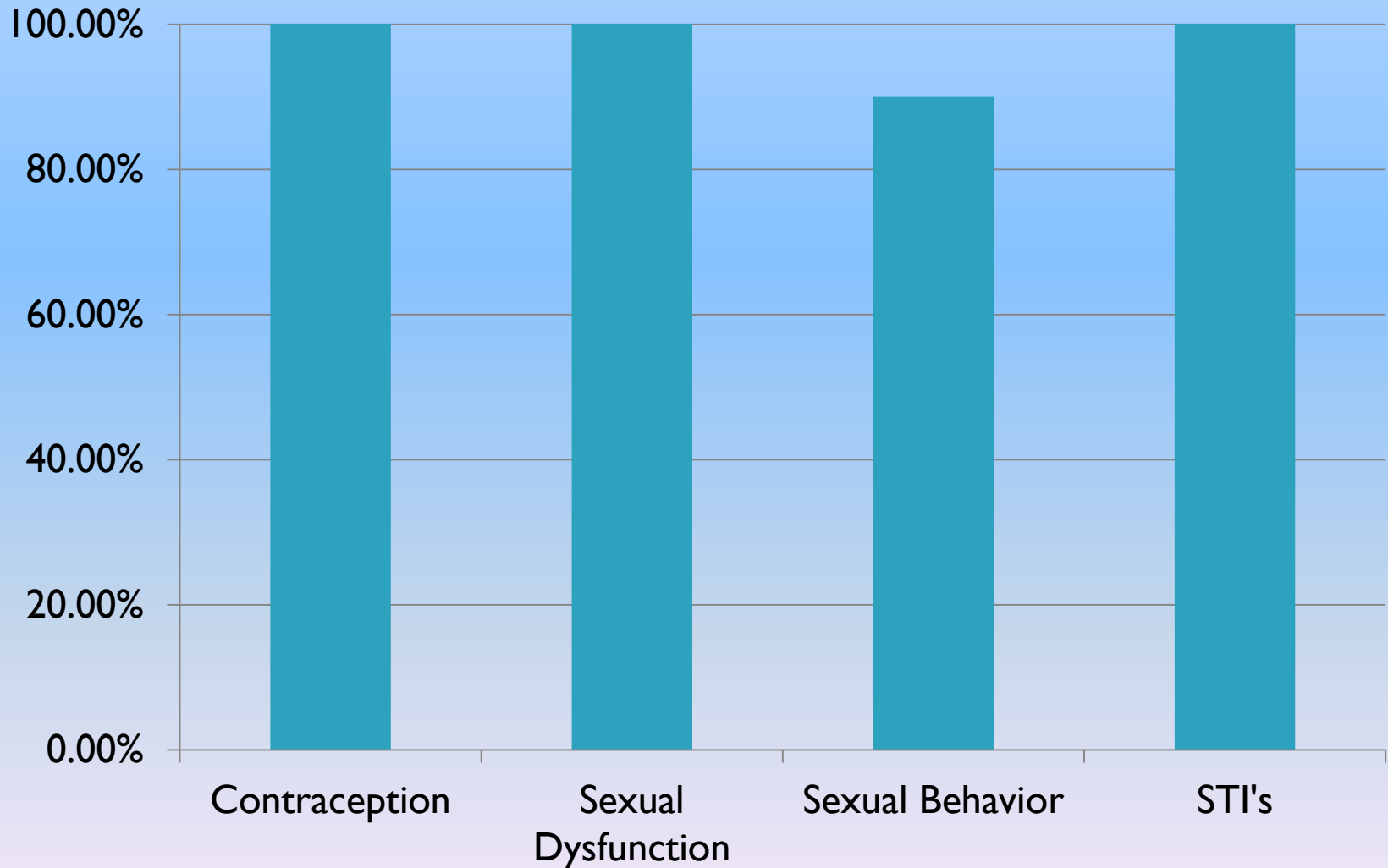


Student sculpting the “optic nerve”

Assessment

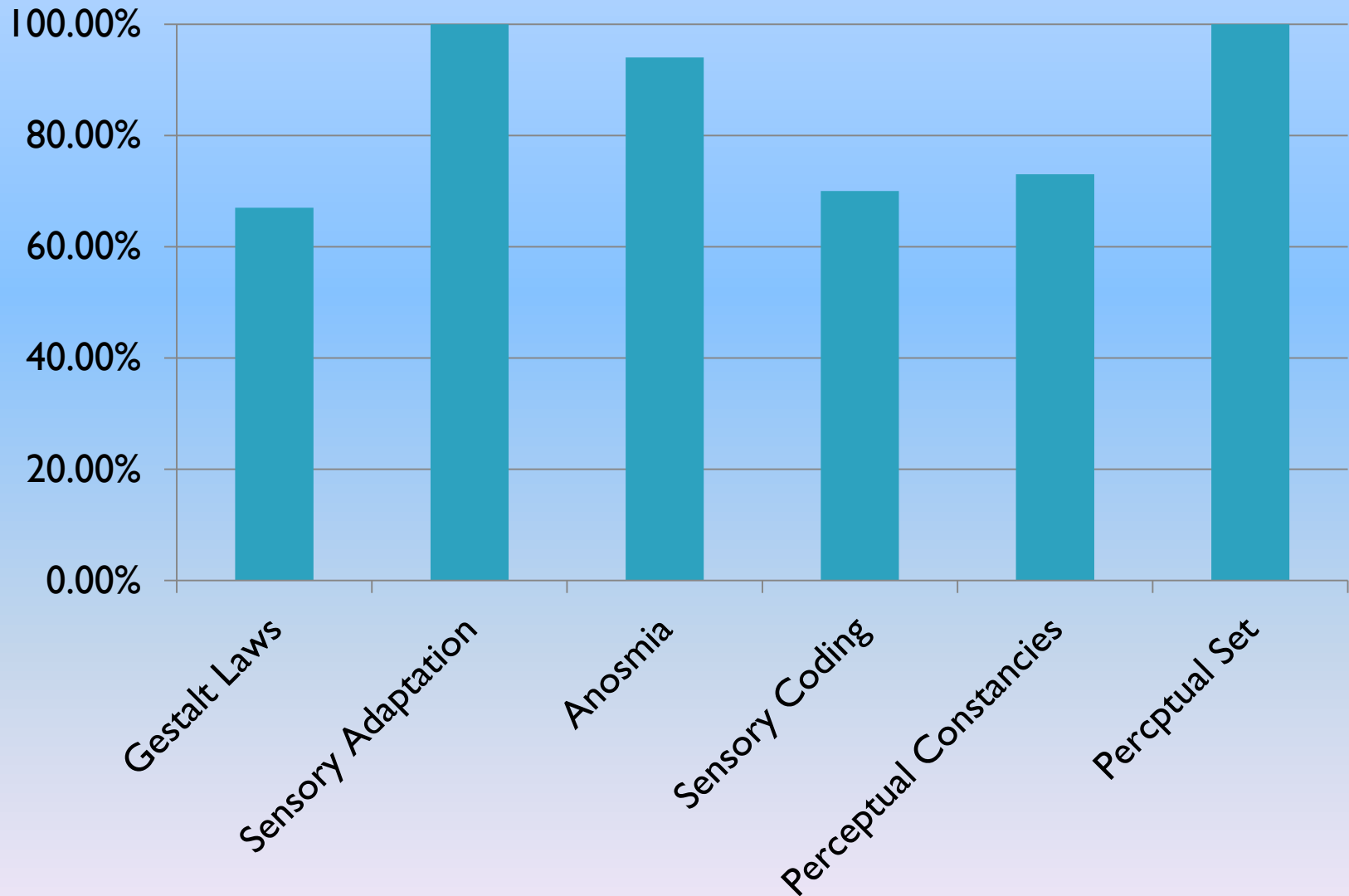


Assessment of student mastery PSY277 (Human Sexuality)

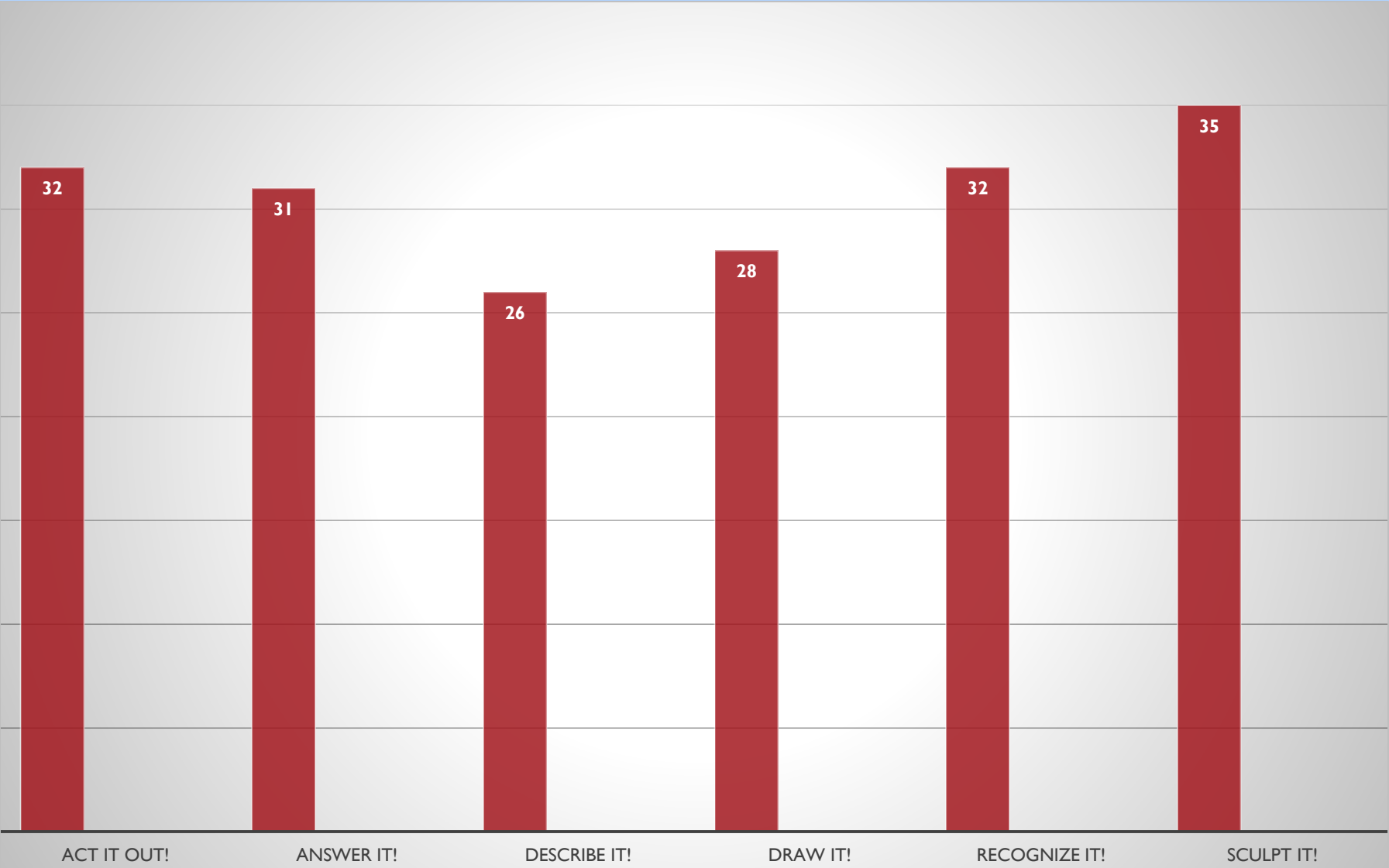


Assessment of student mastery

PSY101 (Intro. to Psych)



Assessment of student enjoyment of question/activity type (N=63)



Assessment of *Mobile Device Gaming Experience*

Did you enjoy the *Learning Catalytics* experience? What did you like most/least?

“Yes, interaction is key when learning.”

“...I liked the sculpting and drawing. Helps if you are a visual learner.”

“To be honest I really enjoyed doing this. It was another way to study. FUN!!”

“It was cool to have the responses and answers so quickly.”

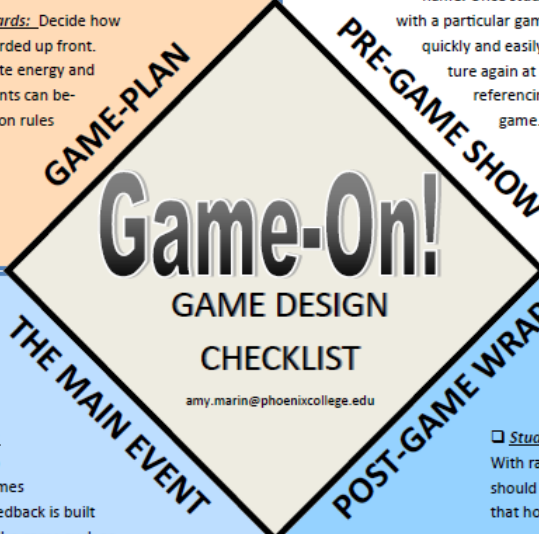
“I like the hints given at the bottom.”

“I enjoyed using this program because we all learn differently and the different types of methods we use help us get it stuck in our brain.”

Goals:

- 1. Define Gamification and expand your thinking about games**
- 2. Provide a variety of examples of how games can be used in the (psychology) classroom**
- 3. Give you tools/inspiration for designing your own games**

Checklist for good game design



Game-On!
GAME DESIGN CHECKLIST
amy.marin@phoenixcollege.edu

1 GAME-PLAN

- Identify Learning Objectives:** Choose learning objectives/goals BEFORE choosing a game (e.g. student engagement, writing practice, critical thinking, concept mastery). Build/select a game that best matches your goal.
- Find the right level:** Game should balance just enough challenge with just enough of a skill set to meet the challenge. Games that are too easy create boredom, and too hard, lead to frustration. Try games that start out easier and become more challenging as players progress.
- Competition/Rewards:** Decide how students will be rewarded up front. Competition can create energy and excitement but students can become overly focused on rules and fairness.

2 PRE-GAME SHOW

- Student Buy-In:** Think about how you will cultivate a culture and expectation of "doing" and "active participation" in your classroom. Without buy-in students may see the game as trivial/unimportant.
- Clearly state the Learning Objectives:** Students need to know at all times "why" they are playing the game and what goals they should accomplish by playing.
- Name the Game:** Give your game a short and catchy name. Once students become familiar with a particular game format, you can quickly and easily use the same structure again at a later time simply by referencing the name of the game.

3 THE MAIN EVENT

- Provide Feedback:** Feedback is critical to learning. The best games are those in which feedback is built into the structure of the game such as when players can't move on in the game until they've mastered some competency.
- Prep for Failure:** Let students know that failure has an important role in learning and that errors should be expected and even welcomed. Anticipate places in the game where difficulties may arise and have an action plan. You may want to have a "cheat sheet" with hints and clues ready to go just in case students get frustrated or stuck.

4 POST-GAME WRAP

- Student Accountability:** With rare exception, games should have an end product that holds students accountable for playing the game. Will you call on students? Ask them to submit something in writing or electronically? Turn in a drawing, image or data?
- Assess Effectiveness:** Assessing student engagement is important, but even more so is assessing how effective a game is in terms of learning outcomes. You may want to assess student performance at the time of the game, or use a longer term assessment, such as including questions from the game content on your next exam.

Gamification:

Using the principles of game mechanics to engage people, motivate action, and promote learning

Game Elements

- Individual Control
- Rules
- Trial and Error
- Constant Change
- Problem-Solving/Challenge
- Competition

Principles of Game Design


- Careful balance of reward and challenge
- Provide positive and negative feedback
- Design for failure as a learning device
- Get players into "flow" state
- Game should be easy to learn, and difficult to master
- Game should be cognitively stimulating and motivating
- Game should be FUN!!!

Why use Games?

- To increase student engagement
- To encourage social interaction and collaboration
- To deliver course content
- To help students master/apply content
- To encourage development of general education skills
- To provide students with feedback on their learning
- As a way to get assessment feedback from student performance as well as instructor effectiveness

Game-Up!

For more ideas on how to "gamify" your course, contact Dr. Amy Marin at Phoenix College (amy.marin@phoenixcollege.edu) for a detailed list and description of psychology games for the classroom.



Solve it!

Heads Up!

Draw it!

What's on my back?

Brainstorm Blitz

Survival games

Act it out!

TV Talk shows and Game Shows

Scavenger Hunts

Daily Puzzles

Game Design Checklist:

1

- Identify Learning Objectives
 - Find the right level**
 - Competition and Rewards
-

2

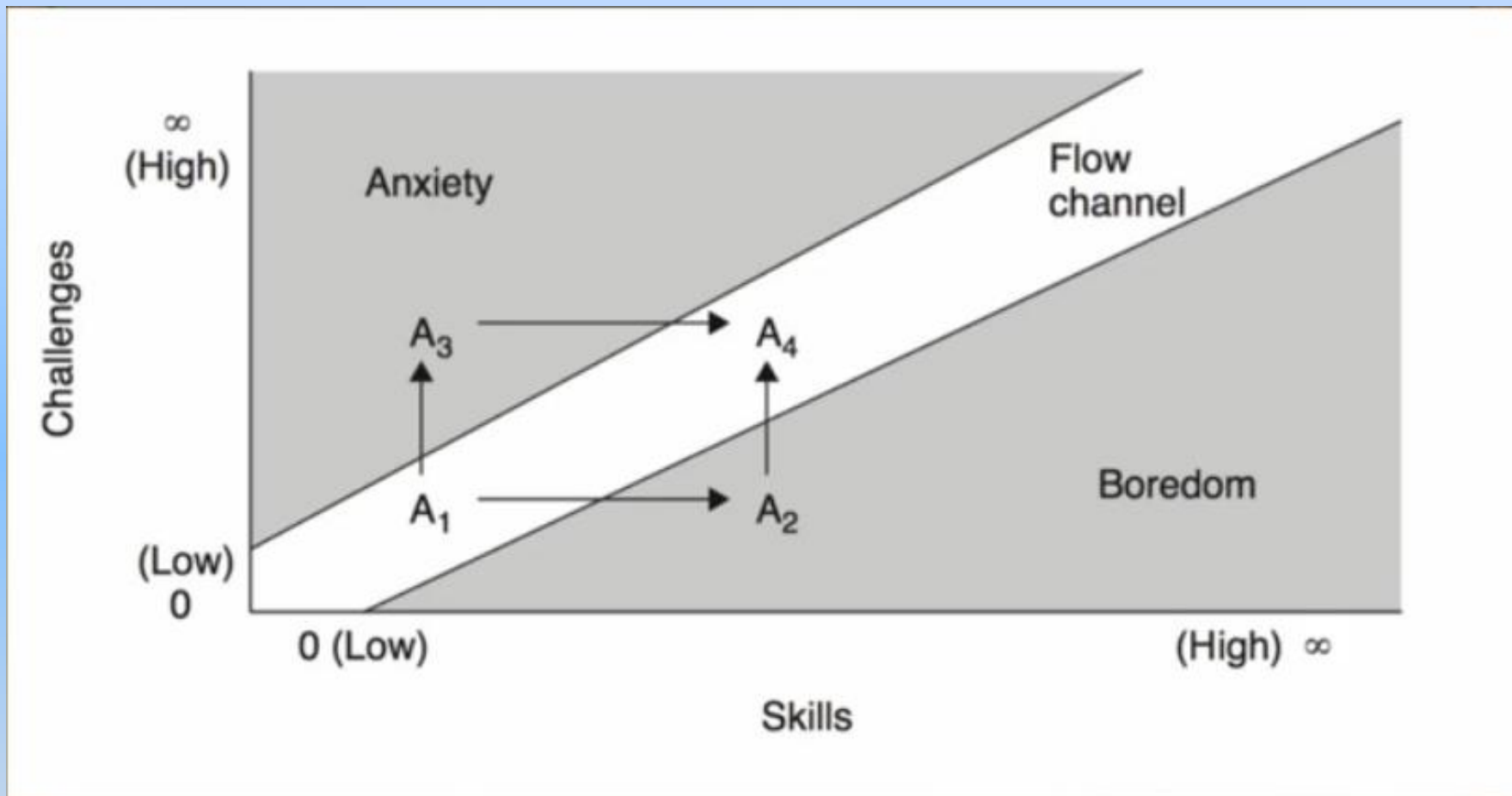
- Student Buy-in
 - Clearly state the learning objectives
 - Name the game
-

3

- Provide feedback
 - Prep for failure
-

4

- Student accountability
- Assess Effectiveness



Are students “in the zone”?

Schell, J. (2014). *The Art of Game Design: A Book of Lenses*. Oxford, UK: Elsevier.

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Game Design Checklist:

1

- Identify Learning Objectives
 - Find the right level
 - Competition and Rewards**
-

2

- Student Buy-in
 - Clearly state the learning objectives
 - Name the game
-

3

- Provide feedback
 - Prep for failure
-

4

- Student accountability
- Assess Effectiveness

Competition in games:



Pros:

- **Competition brings excitement and motivation**

Cons:

- **Competition can shift the focus from the means to the ends**
- **Can increase anxiety/threat (e.g. fear of failure)**
- **Accentuates differences in ability levels**

Healthier ways to use competition:

- 1) Encourage competition with past performance over competition between groups
- 2) Focus on teams/collaboration over individual performance.
- 3) The prize is not “real” (e.g. the reward should not be points towards grade)
- 4) The emphasis is on fun and mastery **OVER** external rewards.

Shindler, J. (2009). Examining the use of competition in the classroom. In *Transformative Classroom Management: Positive strategies to engage all students and promote a psychology of success*. Jossey-Bass.



Take home message....

By using simple gamification techniques we can create an “edutaining” classroom experience that’s both enjoyable and consistent with how students learn.

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Handouts:

- **“Game-on” Checklist**
- **Game Ideas for the Psychology Classroom**

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Questions or Comments?



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