

The role game science plays in promoting a growth mindset in the first year online college student

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Introduction

- Growth mindset
 - Intelligence can be developed through effort (Dweck, 2007)
- Feedback and engagement techniques
- Games with a pedagogical approach have learning benefits (Mayo, 2009)
- Quizlet is a tool that professors might find helpful in promoting a growth mindset classroom.

What Are Mindsets?

- Developed by Carol S. Dweck, Stanford Professor of Psychology
- The idea that a fixed or a growth mindset affects student success
- Praising intelligence and ability does not foster self-esteem, but could jeopardize success (Dweck, 2006)
- “Those who believe their abilities are malleable are more likely to embrace challenges and persist despite failure” (Dweck, 1988)
- Educator mindsets can have an effect the way they respond to students, which could impact outcomes.

Do Your Students Have a Fixed or Growth Mindset?

DEVELOPING A **GROWTH MINDSET**



INSTEAD OF.....	TRY THINKING....
I'm not good at this	What am I missing?
I give up	I'll use a different strategy
It's good enough	Is this really my best work?
I can't make this any better	I can always improve
This is too hard	This may take some time
I made a mistake	Mistakes help me to learn
I just can't do this	I am going to train my brain
I'll never be that smart	I will learn how to do this
Plan A didn't work	There's always Plan B
My friend can do it	I will learn from them

Feedback or feed “forward”

- Typical feedback tells the student what they did wrong.
- While it is important to correct a student’s work, it is also important to let them know what they can do better the next time.
- Praise effort – Professors want to help students focus on strategies and efforts.
- Perhaps ask questions of the student in summative feedback.
- Ensure that feedback is highly individualized
- Do not praise intelligence as this can lead to a fixed mindset.

More Growth Mindset Resources

- <https://www.mindsetworks.com/science/default>
- <http://mindsetonline.com/>

Background of Gamification

- Gamification is “the use of game design elements in non-game contexts”(Harrold, 2015).
- Recently Introduced as a Part of Course Design
- Differentiation
- More Rigorous
- Authentic Forms of Education
- Types of Games
 - Narrative
 - Interactive
 - Play
 - Collaboration

Benefits of Gamification

- Gamification as a Motivational Development
- Technology Infused Instruction
- Different Options
- Students Work and Succeed Autonomously
- Enticing and Challenging
- Exploration
- Long Term Objectives
- Short Term Tasks and Quests
- Encourages Multiple Attempts
- Promote Engagement

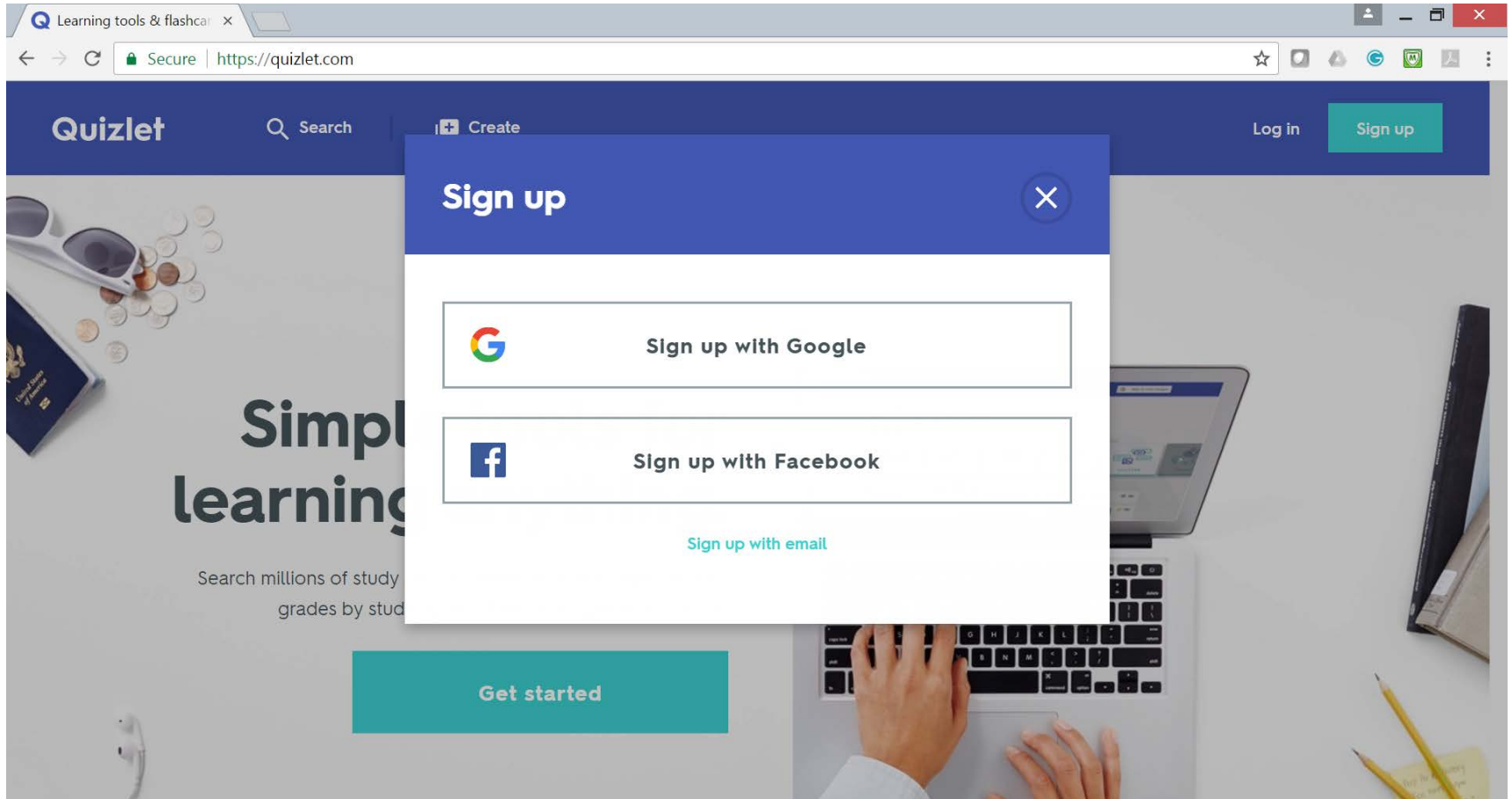
Encouraging Growth Mindset Through Gamification

- Motivate the “player” to complete tasks and engage in content:
 - Awards
 - Freedom to Fail
 - Tiered Difficulty
 - Choice
- Gamification to Include Growth Mindset
- Fundamental Restructuring of the Classroom.
- Role Playing Games

Opportunities for Improved Gamification

- Higher Education Research
- Options/Variety
- Duration
- Ease of Use
- Mixed Success
- Results Vary Depending on Specific Game Elements and Context of the Game.
- Educational Focus vs. Entertainment
- Dashboard Information
- Mobile Games

Sign up



Create Module

The screenshot shows the Quizlet website interface. The top navigation bar is blue and contains the Quizlet logo, a search bar, a 'Create' button (highlighted with a yellow circle and an arrow), an 'Upgrade to Quizlet Plus' button, and a user profile for 'jeff_judd7'. The left sidebar is yellow and contains links for 'Latest Activity', 'Your Study Sets', 'Settings', 'Send feedback', 'YOUR CLASSES', 'Join or create a class', 'YOUR FOLDERS', 'Create a folder', and 'QUIZLET NEWS'. The main content area is white and features a 'Latest Activity' section with two cards: 'Invite your friends' (with a 'Create a class' button) and 'Visit the Help Center' (with a 'Check it out' button). Below these cards is a 'THIS WEEK' section showing a '10 terms' set by 'jeff_judd7' titled 'Demo #2'. A small video player is visible in the bottom right corner.

Quizlet

Search

Create

Upgrade to Quizlet Plus

jeff_judd7

Latest Activity

Your Study Sets

Settings

Send feedback

YOUR CLASSES

Join or create a class

YOUR FOLDERS

Create a folder

QUIZLET NEWS

Quizlet

10 terms jeff_judd7

Demo #2

Invite your friends

Create a class to study with friends. [Learn more.](#)

Create a class

Visit the Help Center

Discover what you can do on Quizlet with FAQs & tutorials.

Check it out

THIS WEEK

Create Study Set

Quizlet

Search Create

Upgrade to Quizlet Plus

jeff_judd7

Create a new study set

Create

Type in your title

TITLE

[Import from Word, Excel, Google Docs, etc.](#)

Visible to everyone [Change](#)

Only editable by me [Change](#)

English Spanish Choose language

English Spanish Choose language

1 Enter term

TERM

Enter definition

DEFINITION

Excel Spreadsheet

Book1 - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View

Clipboard Font Alignment Number Styles Cells Editing

B15

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	Motivation	External and internal locus of control influence what?														
2	Academic Integrity	Following a code of moral values in all aspects of academic life-classes, assignments, tests, papers, projects, and relationships with students and faculty is														
3	Self-esteem	Doing the right thing increases what?														
4	Knowledge	Earned knowledge equals lasting what?														
5	Skill	Mastering integrity now makes it a lifelong what?														
6	Respect	Standing up for your beliefs earns _____ from others?														
7	Fixed mindset	The belief that people have a set level of talent and intelligence?														
8	Growth mindset	The perception that talent and intelligence can develop with effort?														
9	Analytical thinking, Creative thinking, Practical	What at the three skill combination that Sternberg calls successful intelligence?														
10	Analyze what happened	How do we learn from failure?														
11																
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Sheet1 Sheet2 Sheet3

Ready

100%

Insert Your Data From Excel

Create a New Study Set | x

Secure | <https://quizlet.com/create-set>

CANCEL IMPORT

Import your data. Copy and Paste your data here (from Word, Excel, Google Docs, etc.)

Here is where you will copy and paste your data into.

Between term and definition

☒ Tab ☐ Comma ☐ - ☐ CUSTOM

Between cards

☒ New line ☐ Semicolon ☐ \n\n ☐ CUSTOM

Import

Data's Entered

Create a New Study Set | x

Secure | <https://quizlet.com/create-set>

CANCEL IMPORT

Import your data. Copy and Paste your data here (from Word, Excel, Google Docs, etc.)

Motivation External and internal locus of control influence what?

Academic Integrity Following a code of moral values in all aspects of academic life-classes, assignments, tests, papers, projects, and relationships with students and faculty is what?

Self-esteem Doing the right thing increases what?

Knowledge Earned knowledge equals lasting what?

Skill Mastering integrity now makes it a lifelong what?

Respect Standing up for your beliefs earns _____ from others?

Fixed mindset The belief that people have a set level of talent and intelligence?

Growth mindset The perception that talent and intelligence can develop with effort?

Analytical thinking, Creative thinking, Practical What at the three skill combination that Sternberg calls successful intelligence?

Between term and definition

☒ Tab

☐ Comma

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CUSTOM

Between cards

☒ New line

☐ Semicolon

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CUSTOM

Import

New Study Set

Create a New Study Set | x

Secure | <https://quizlet.com/create-set>

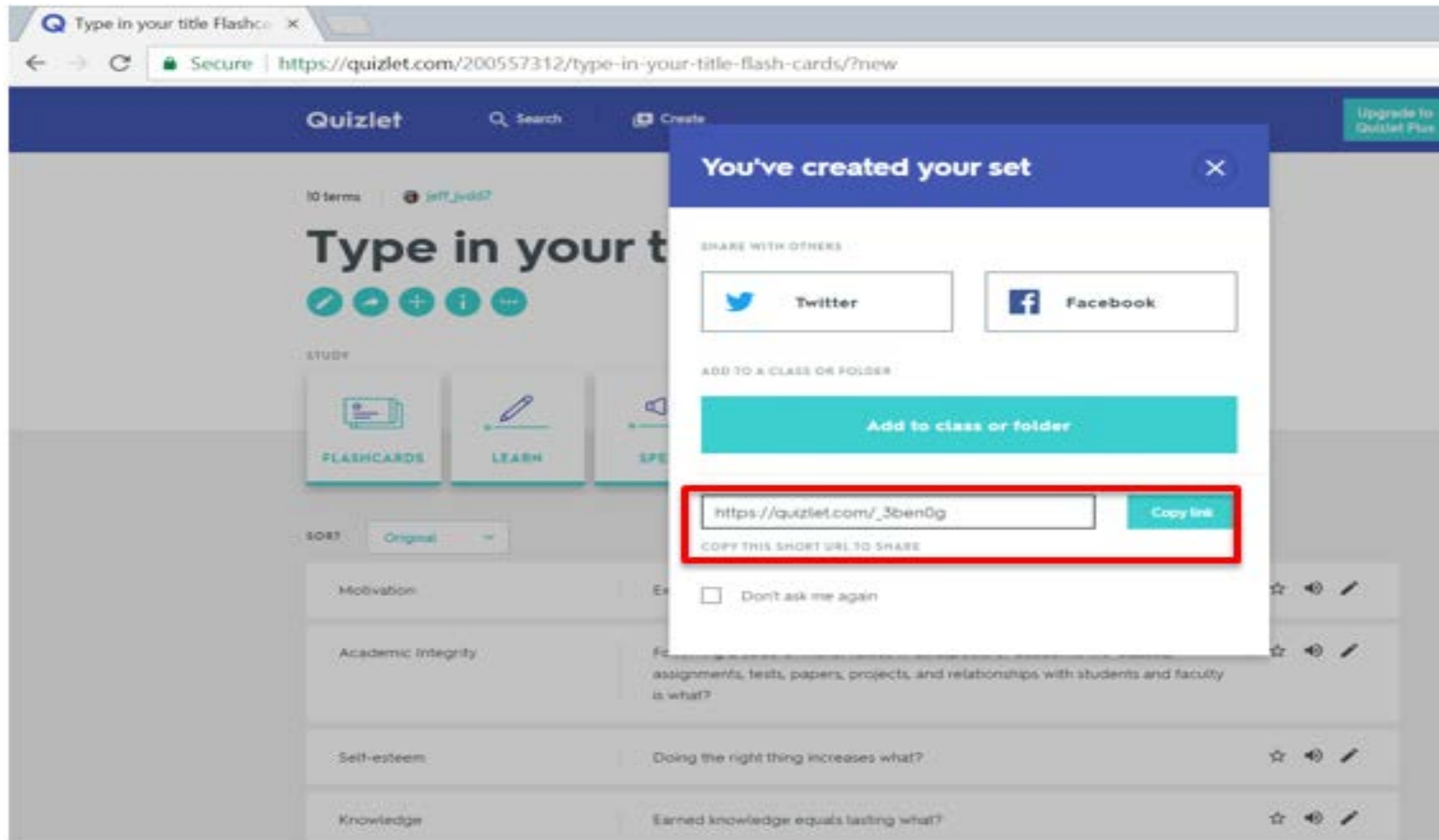
Create a new study set Saved 10 terms just now **Create**

English Spanish Choose language

English Spanish Choose language

1	Motivation TERM	External and internal locus of control influence what? DEFINITION
2	Academic Integrity TERM	Following a code of moral values in all aspects of academic life-classes, assignments, tests, papers, projects, and relationships with students and faculty is what? DEFINITION
3	Self-esteem TERM	Doing the right thing increases what? DEFINITION
4	Knowledge TERM	Earned knowledge equals lasting what? DEFINITION
5	Skill TERM	Mastering integrity now makes it a lifelong what? DEFINITION
6	Respect TERM	Standing up for your beliefs earns _____ from others?

Share your URL



Finished Demo

Demo #2 Flashcards | Q x




Secure | <https://quizlet.com/200004709/demo-2-flash-cards/>

Demo #2

Soft STUDY

FLASHCARDS LEARN SPELL TEST MATCH GRAVITY

SORT Original

Motivation	External and internal locus of control influence what?		☆ 🔊 ✎
Academic Integrity	Following a code of moral values in all aspects of academic life-classes, assignments, tests, papers, projects, and relationships with students and faculty is what?		☆ 🔊 ✎
Self-esteem	Doing the right thing increases what?		☆ 🔊 ✎

1/20 2/20 3/20 4/20 5/20 6/20 7/20 8/20 9/20 10/20 11/20 12/20 13/20 14/20 15/20 16/20 17/20 18/20 19/20 20/20

Flash Cards

Quizlet Search Create Upgrade to Quizlet Plus

Back

CARDS

PROGRESS 1/10

YOU CAN DO IT!

External and internal locus of control influence what?

CLICK TO FLIP

Play Shuffle

of Phoenix®

Testing


Quizlet Search Create

Back

TEST

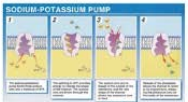
4 Written questions

1. The belief that people have a set level of talent and intelligence?




TYPE THE ANSWER

2. How do we learn from failure?



TYPE THE ANSWER

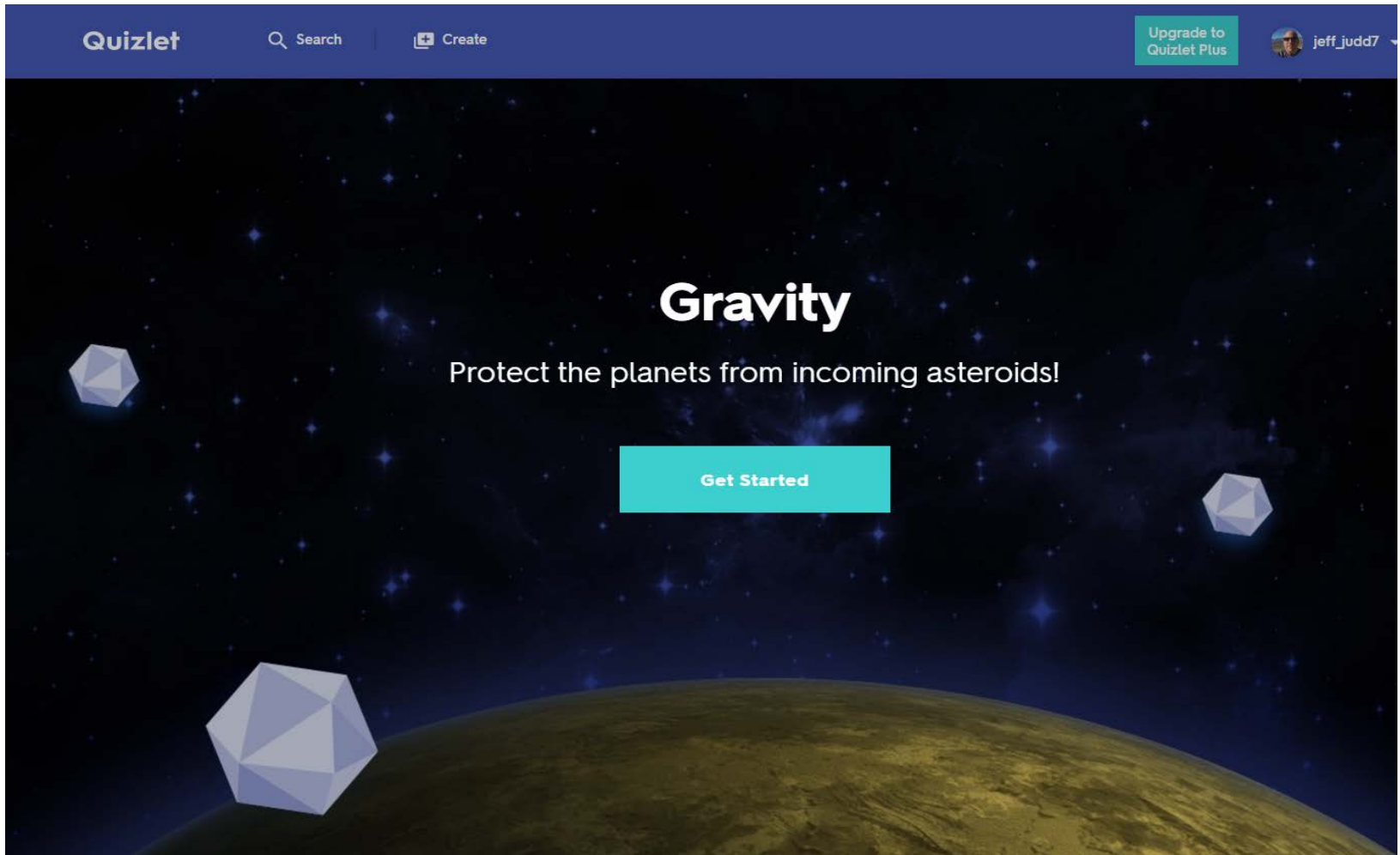
3. What are the three skill combination that Sternberg calls successful intelligence?



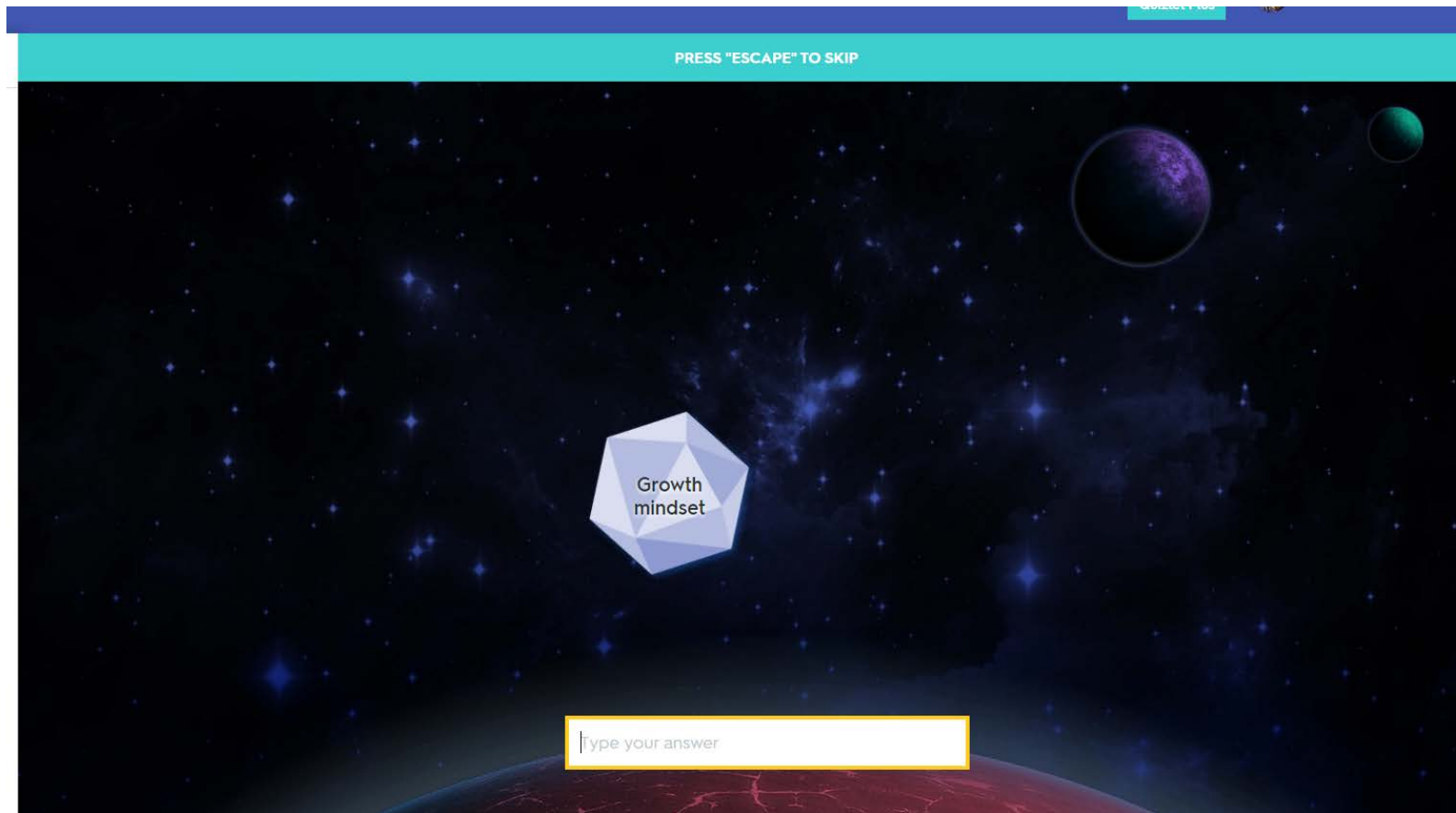
Print test

Options Customize your study session

Gravity



Gravity



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Game Resources

- <http://www.propofs.com/games/create-game/>
- <http://www.classtools.net/>
- <http://www.yoyogames.com/gamemaker>
- <https://quizlet.com/>
- <http://www.sploder.com/>
- <https://www.glasslabgames.org/games/catalog>
- <https://www.kahoot.com/>