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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

https://www.pinterest.com/alecaude/mindset-for-students/

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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

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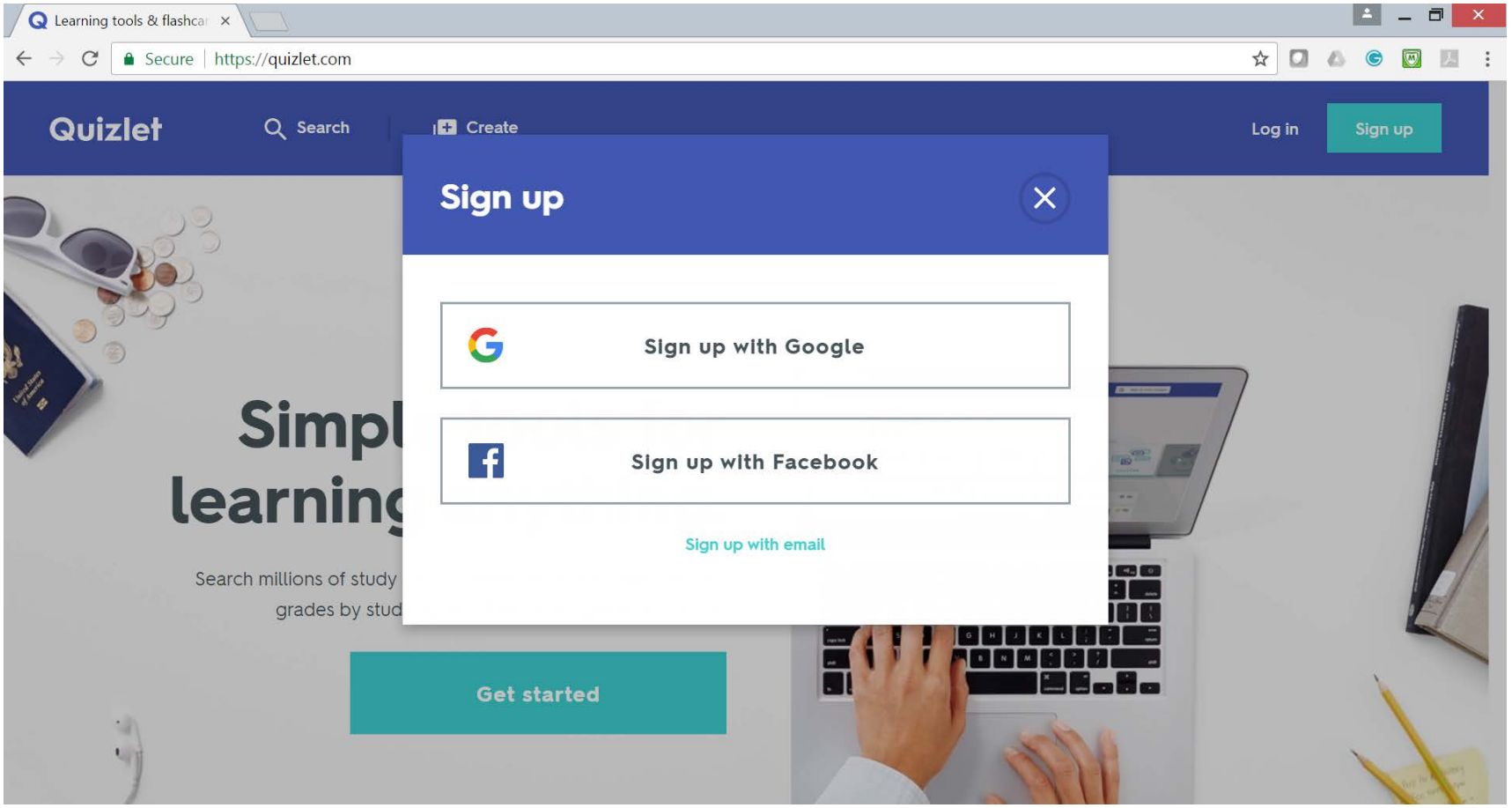
Encouraging Growth Mindset Through Gamification

- 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


Learning tools & flashca
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Quizlet
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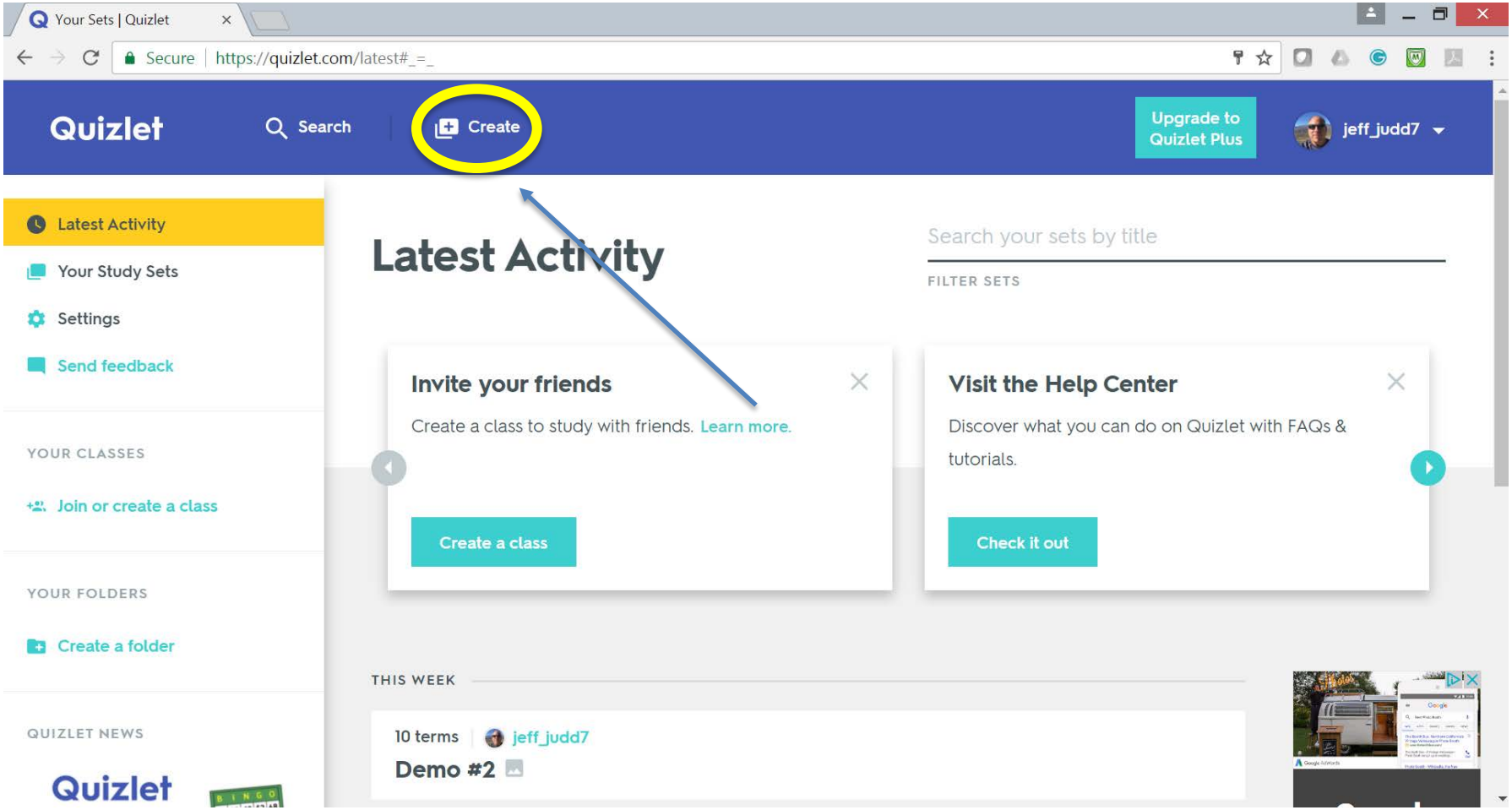
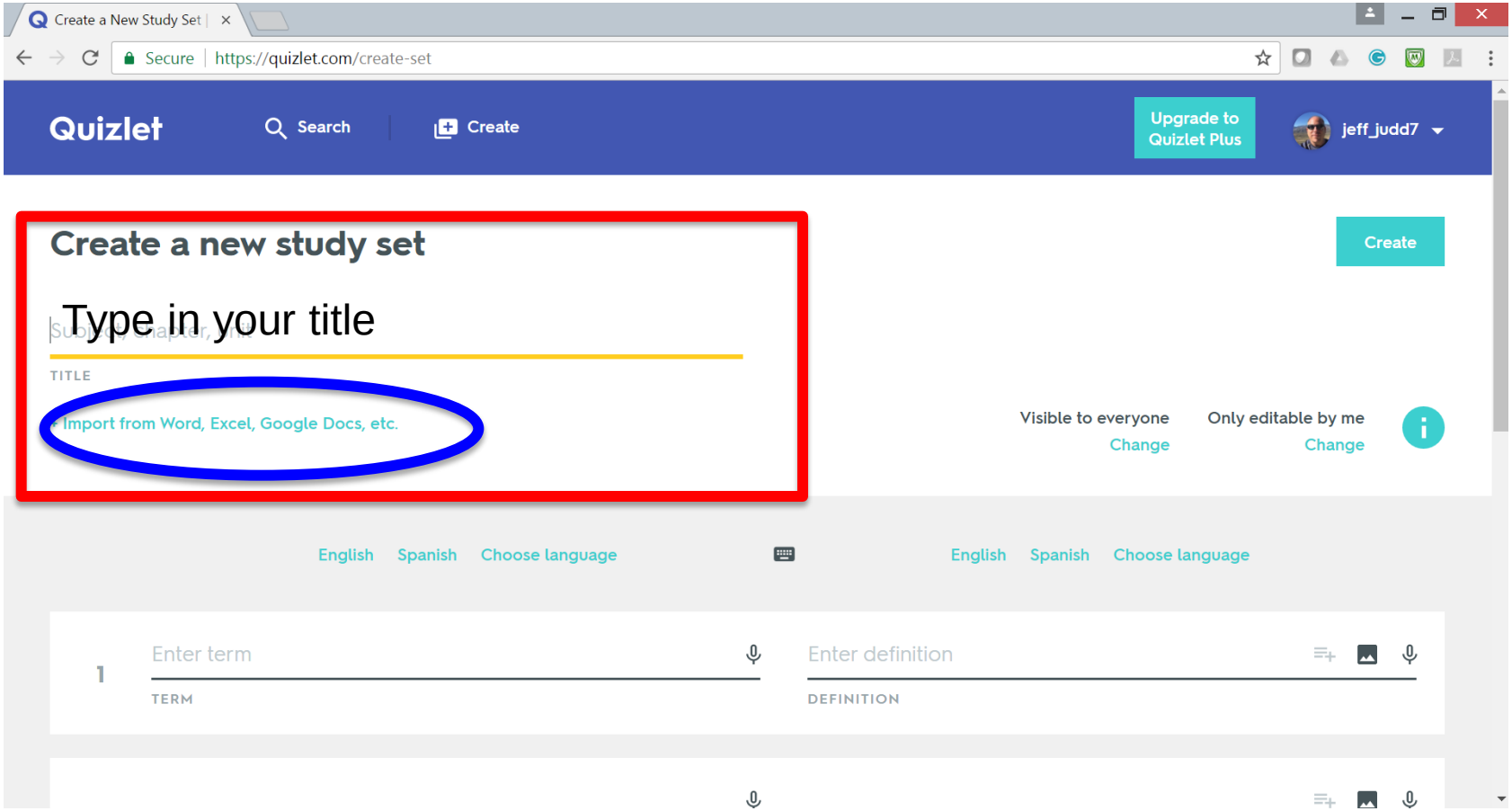
Get started

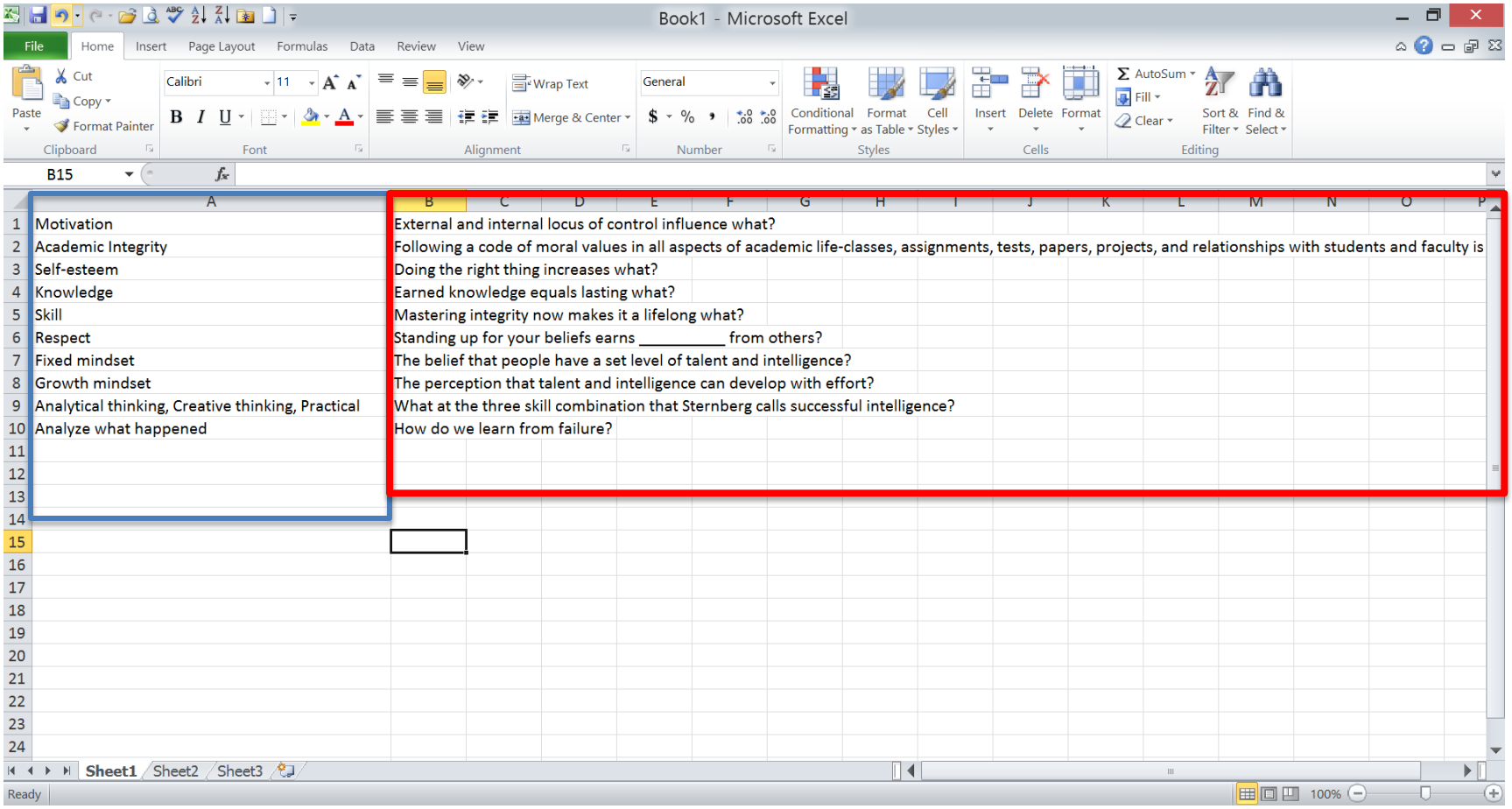
Create Module



Create Study Set



Excel Spreadsheet



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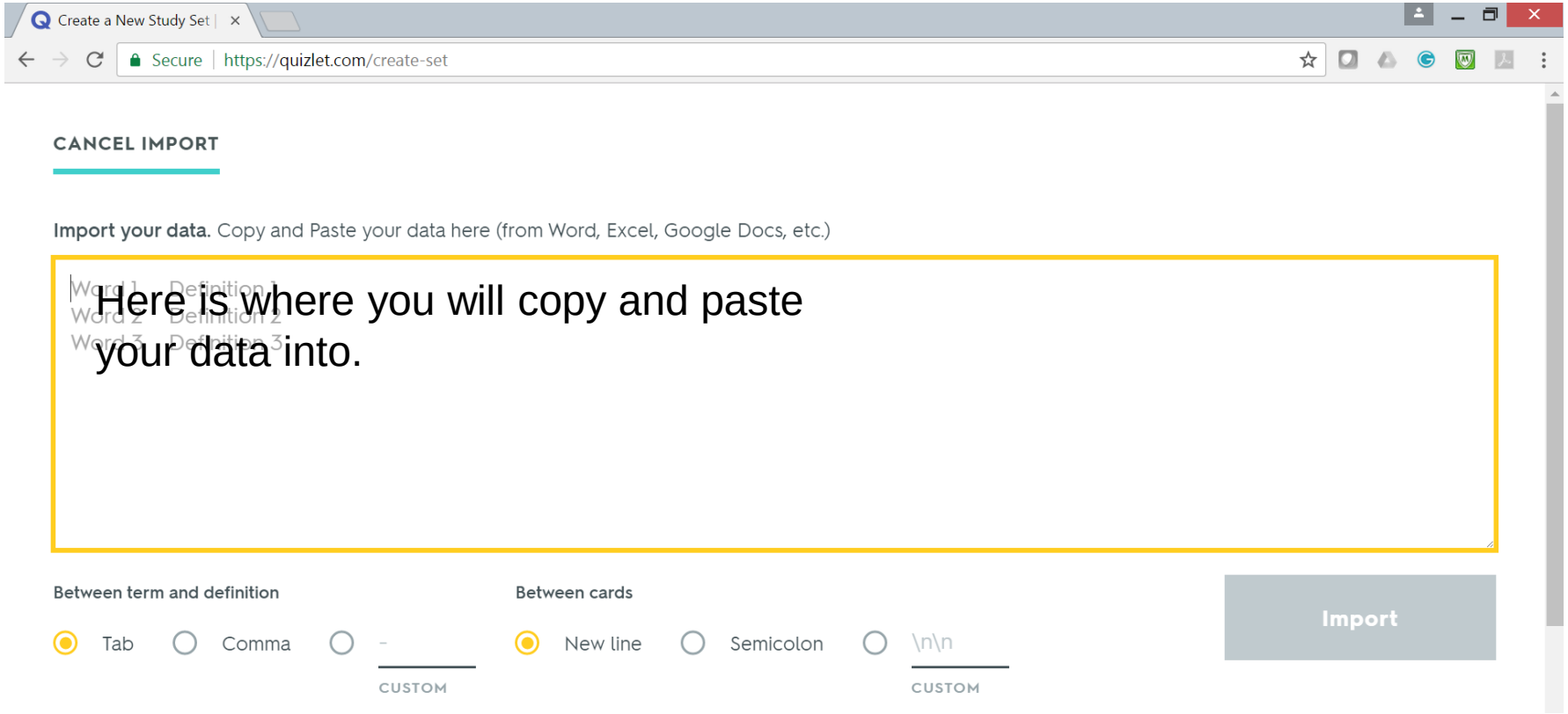
Insert Your Data From Excel



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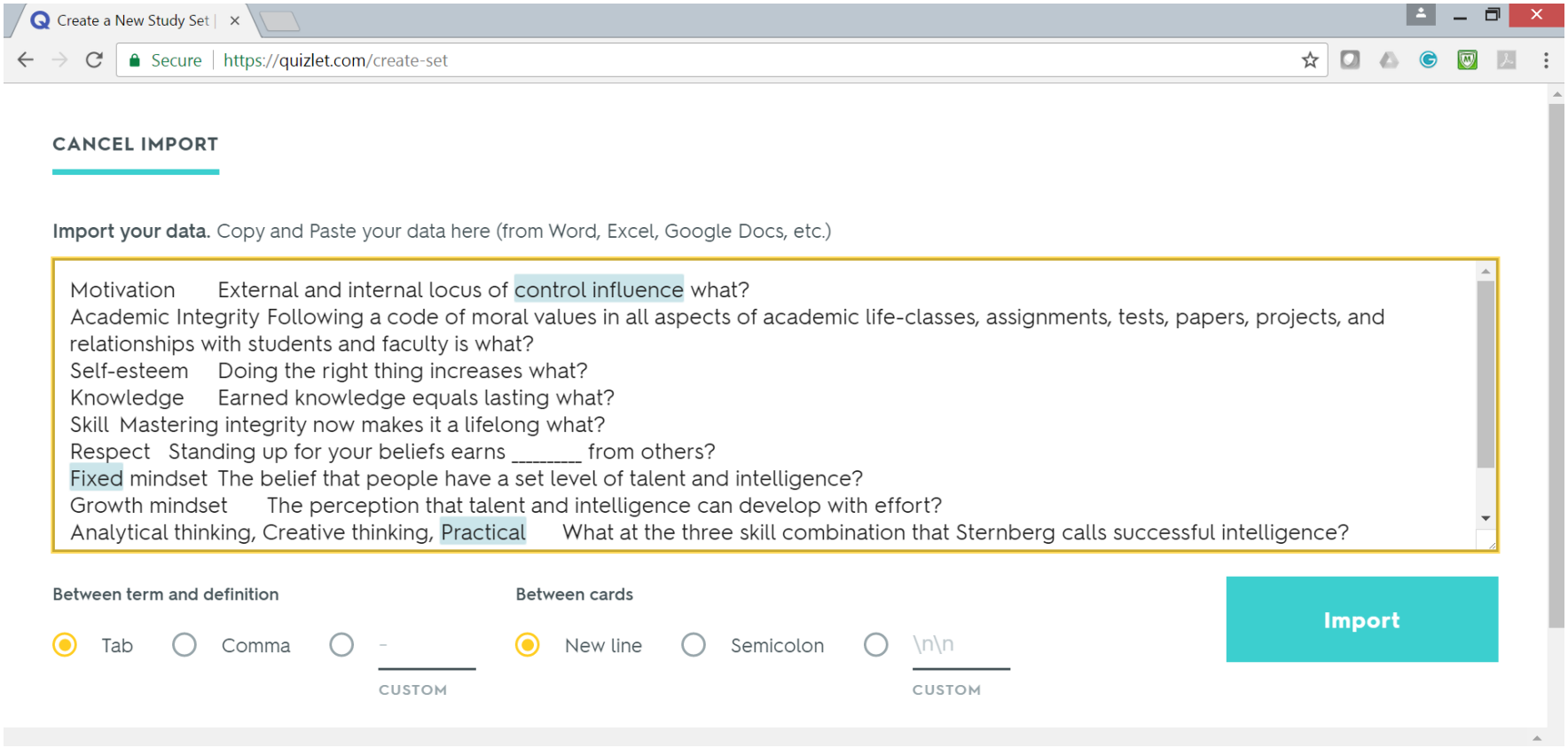
Data's Entered



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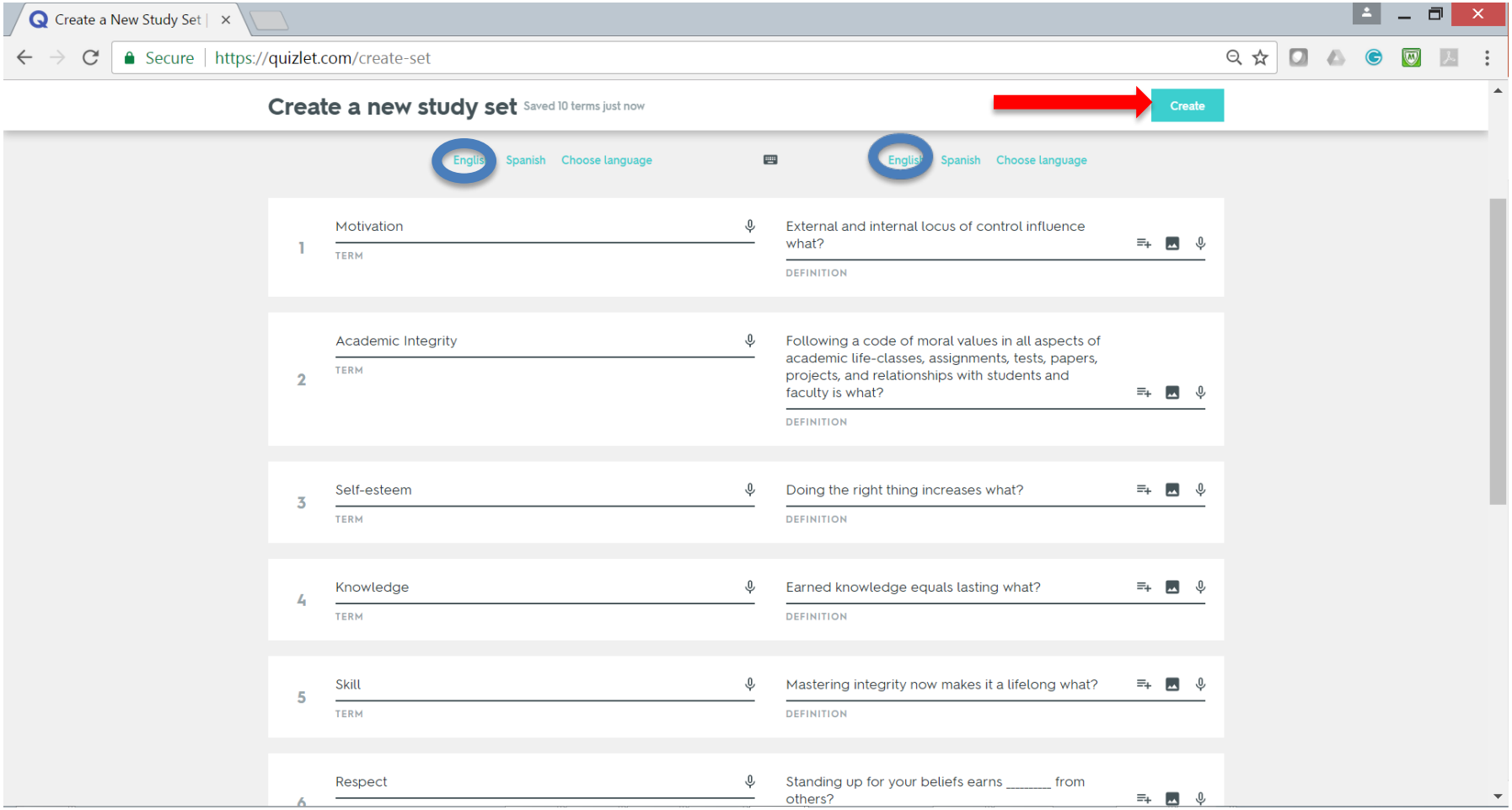
New Study Set



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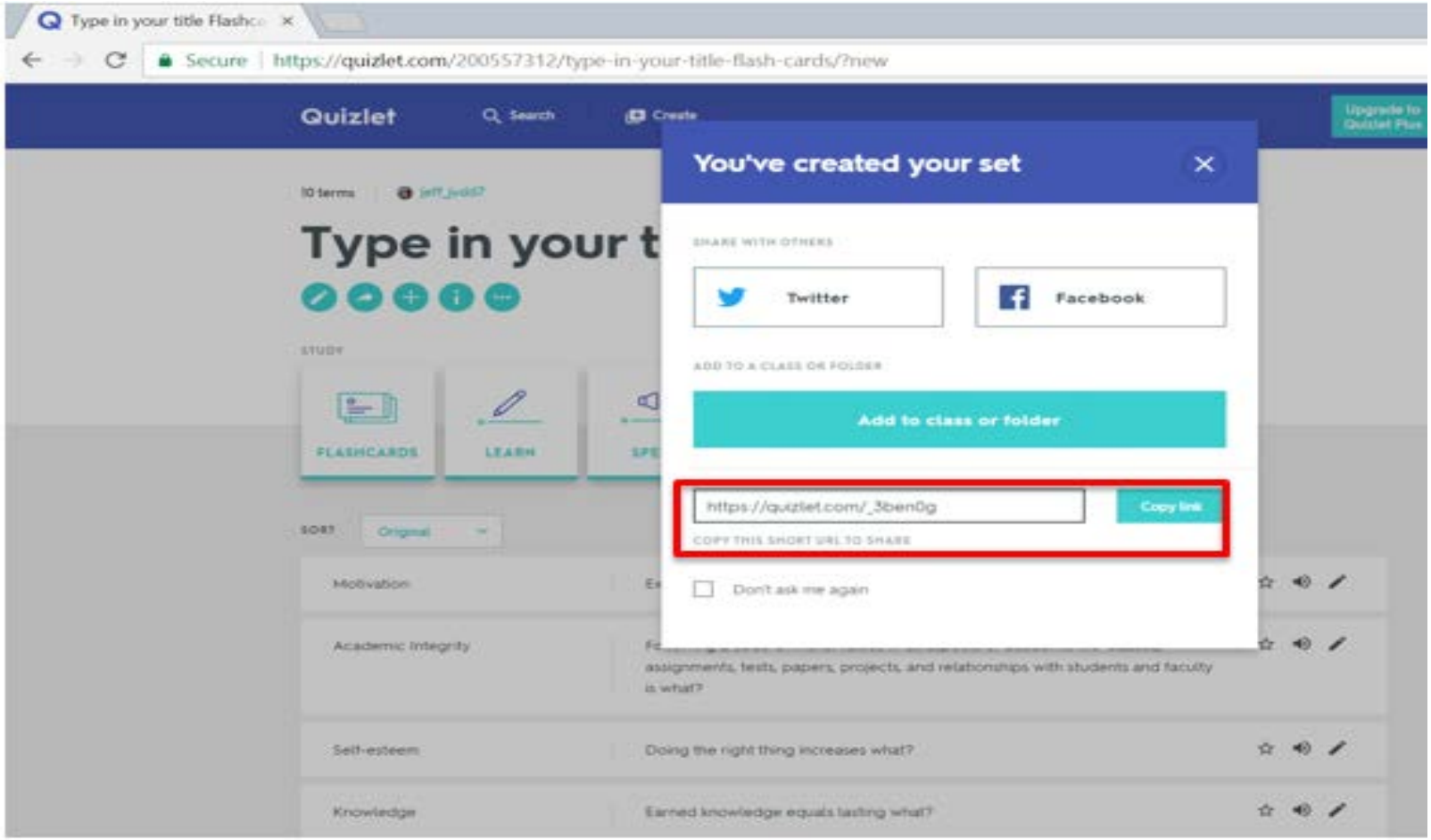
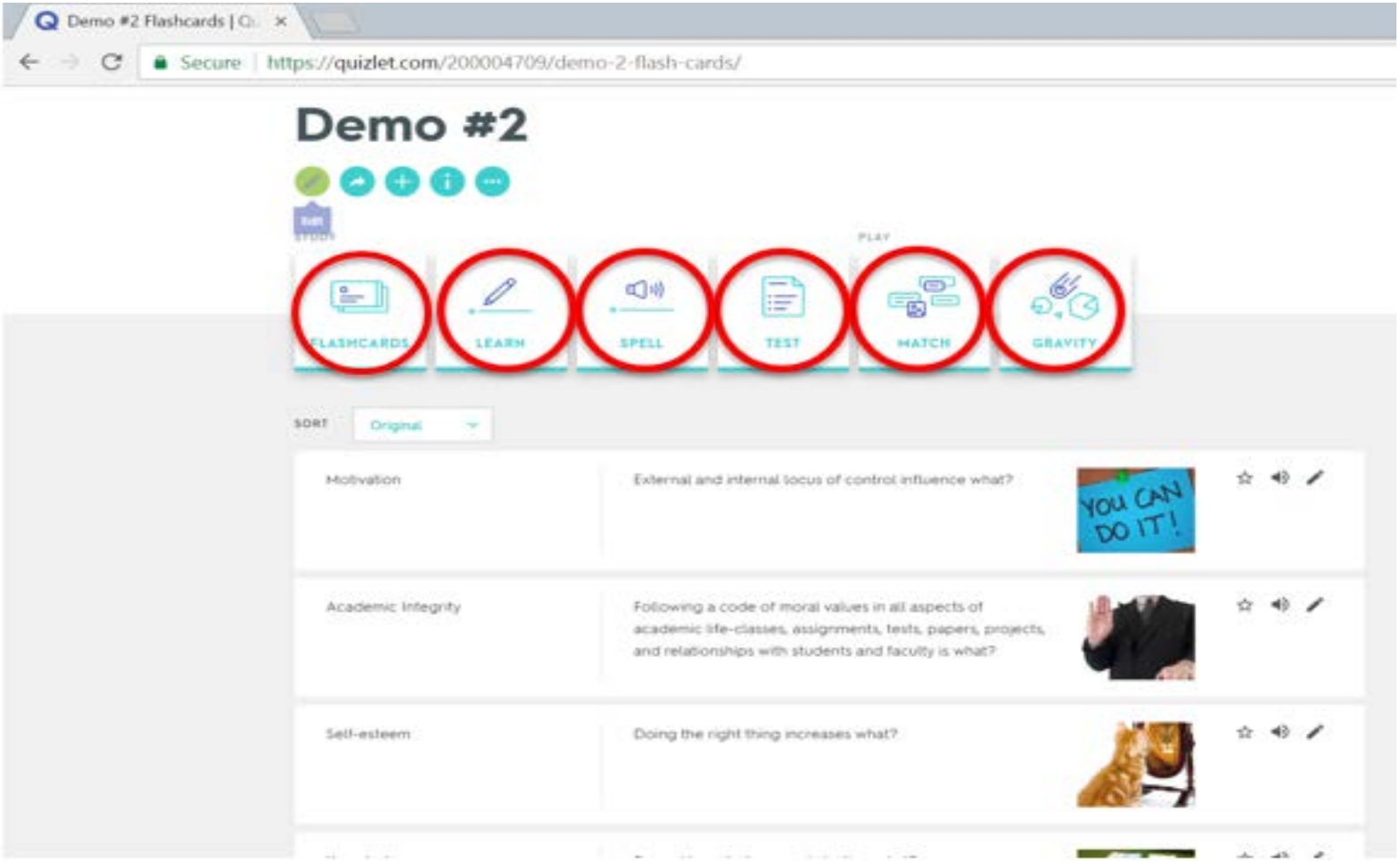
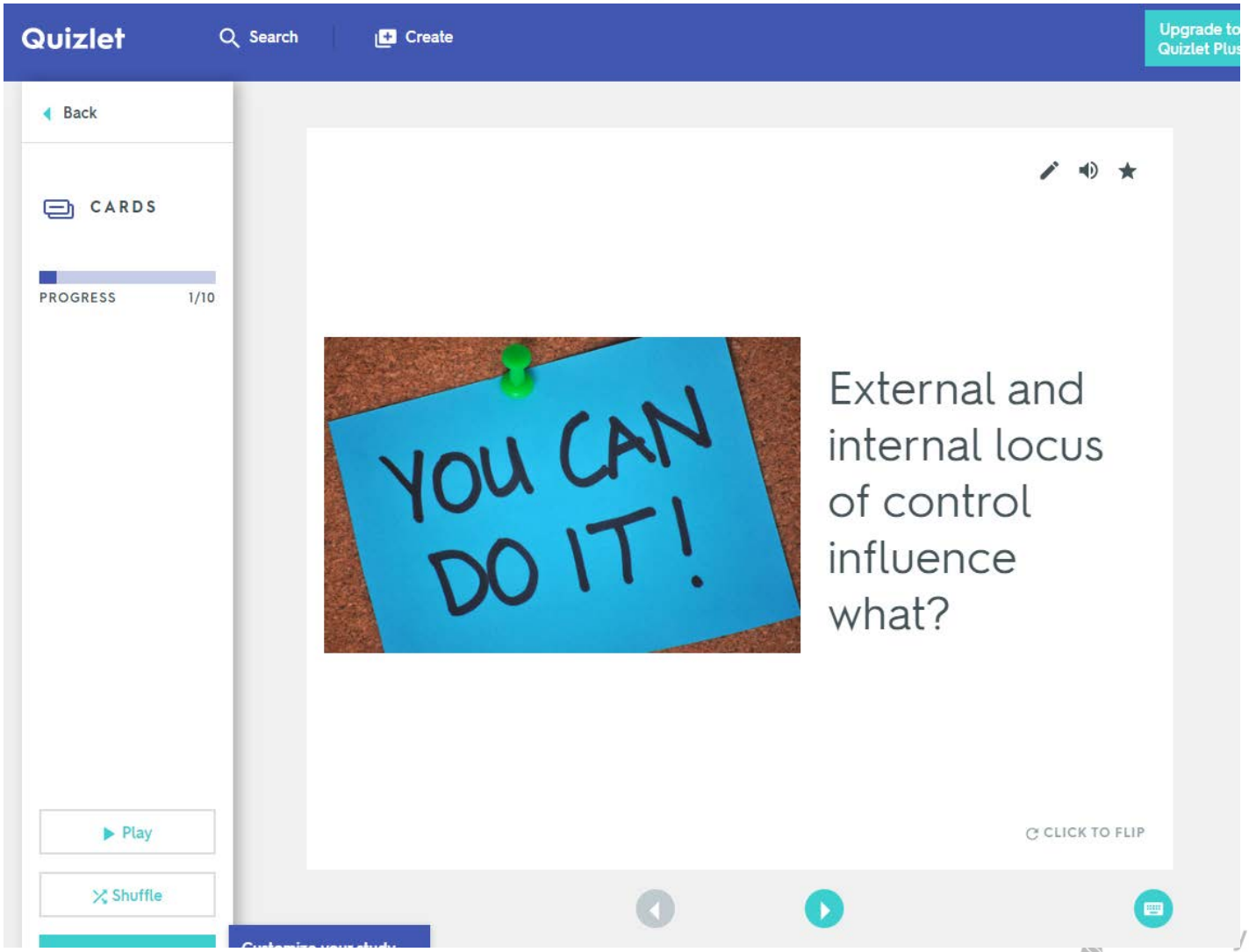


Finished Demo



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

Testing

Quizlet Search Create

Back

TEST

4 Written questions

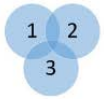
1. The belief that people have a set level of talent and intelligence?

TYPE THE ANSWER

2. How do we learn from failure?

TYPE THE ANSWER

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



Print test

Options

Customize your study session

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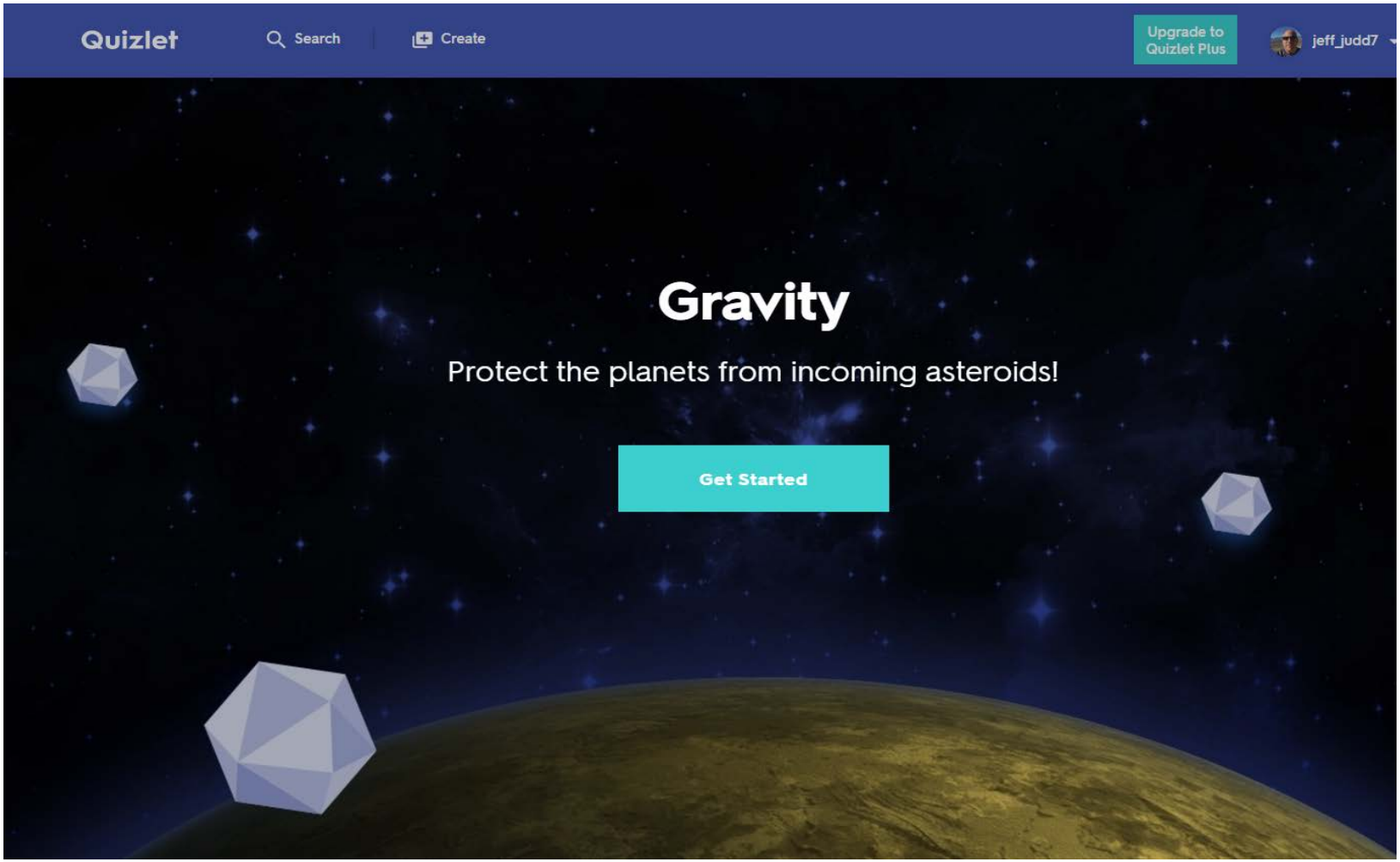
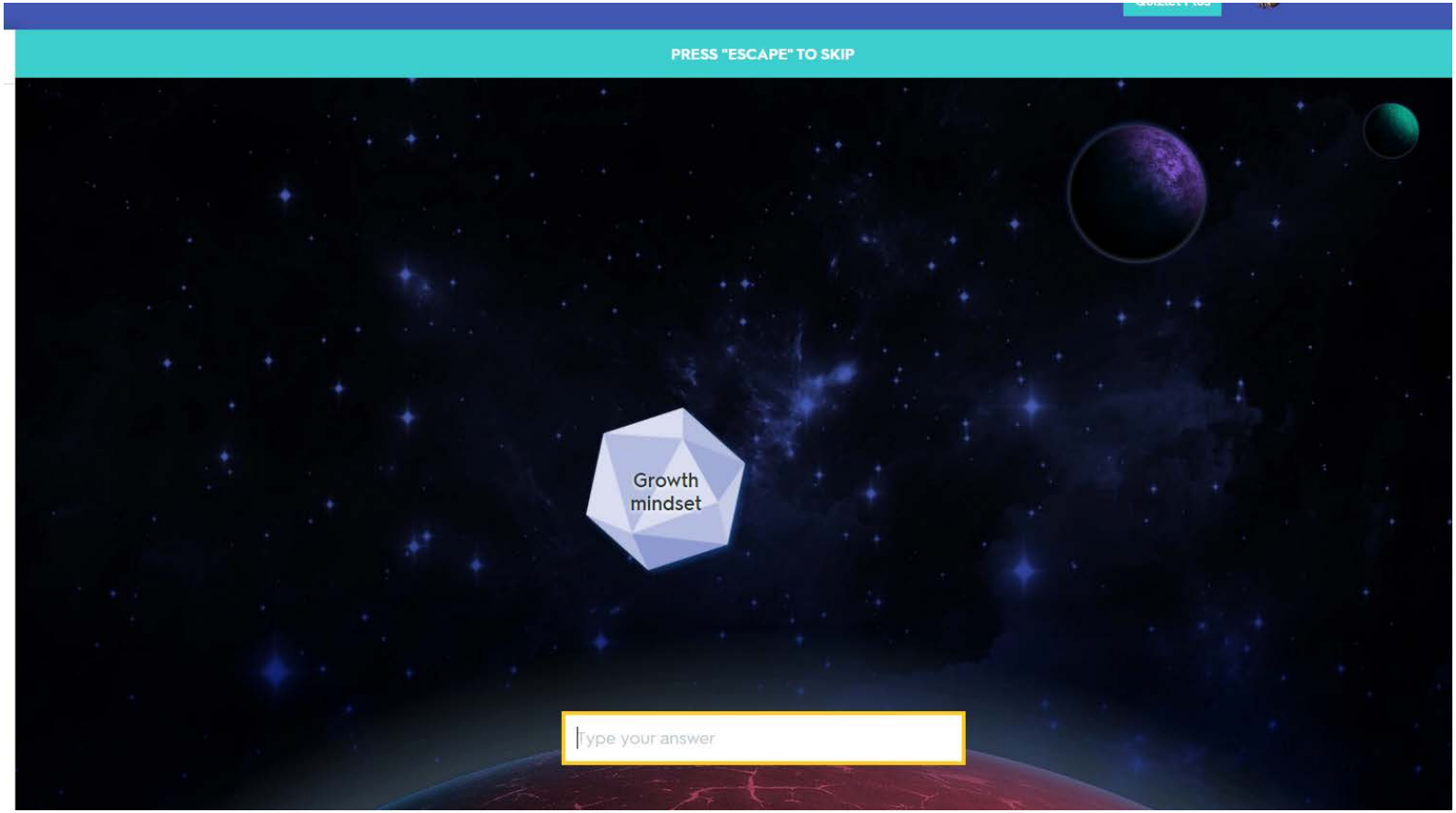
Gravity


Quizlet
Search
Create
Upgrade to Quizlet Plus
jeff_judd7
Gravity
Protect the planets from incoming asteroids!
Get Started

Gravity



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Game Resources

- http://www.proprofs.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/

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