



# Flipped with Purpose

Dr. Gary Ackerman

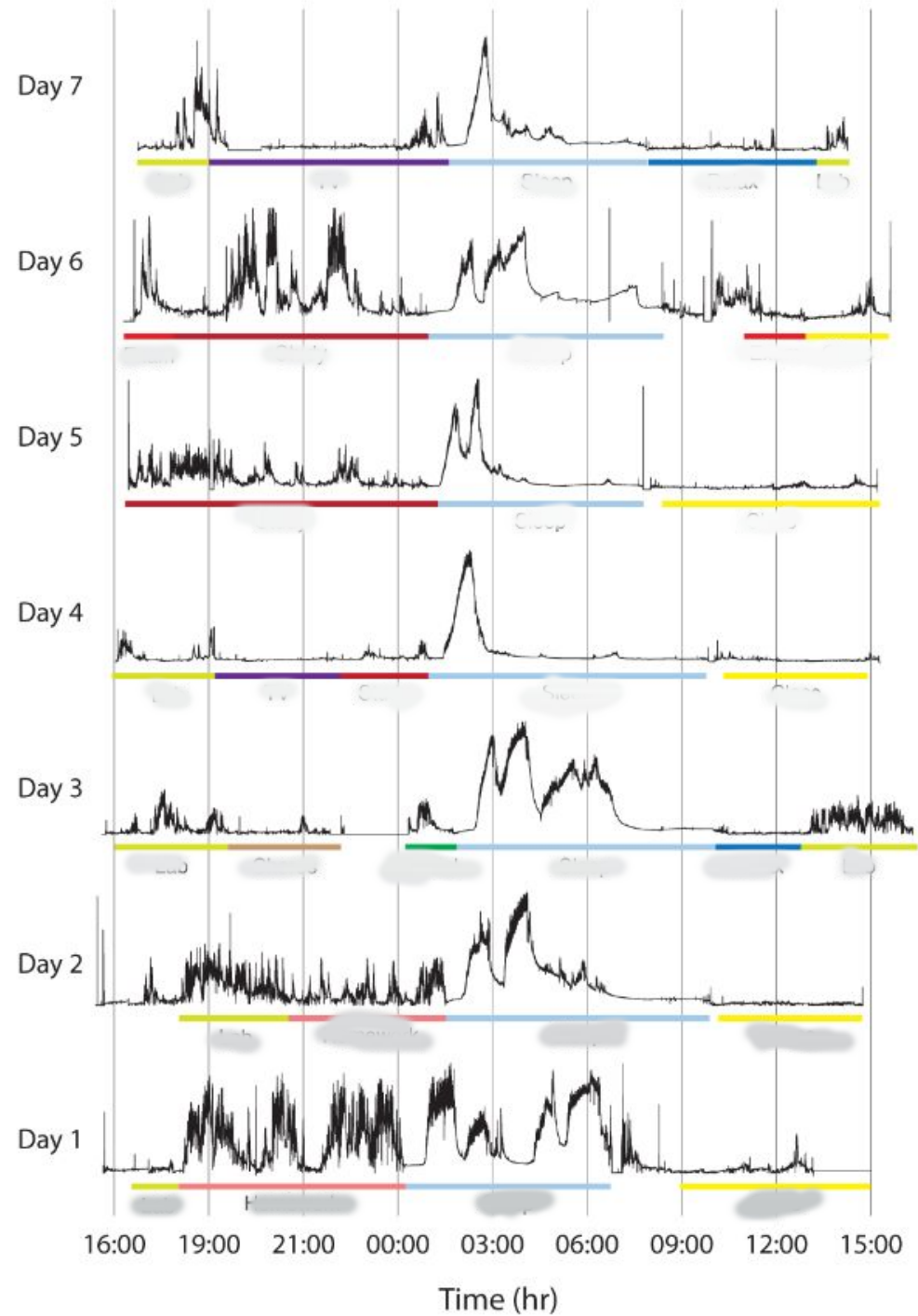
Technology Integration Specialist and Coordinator

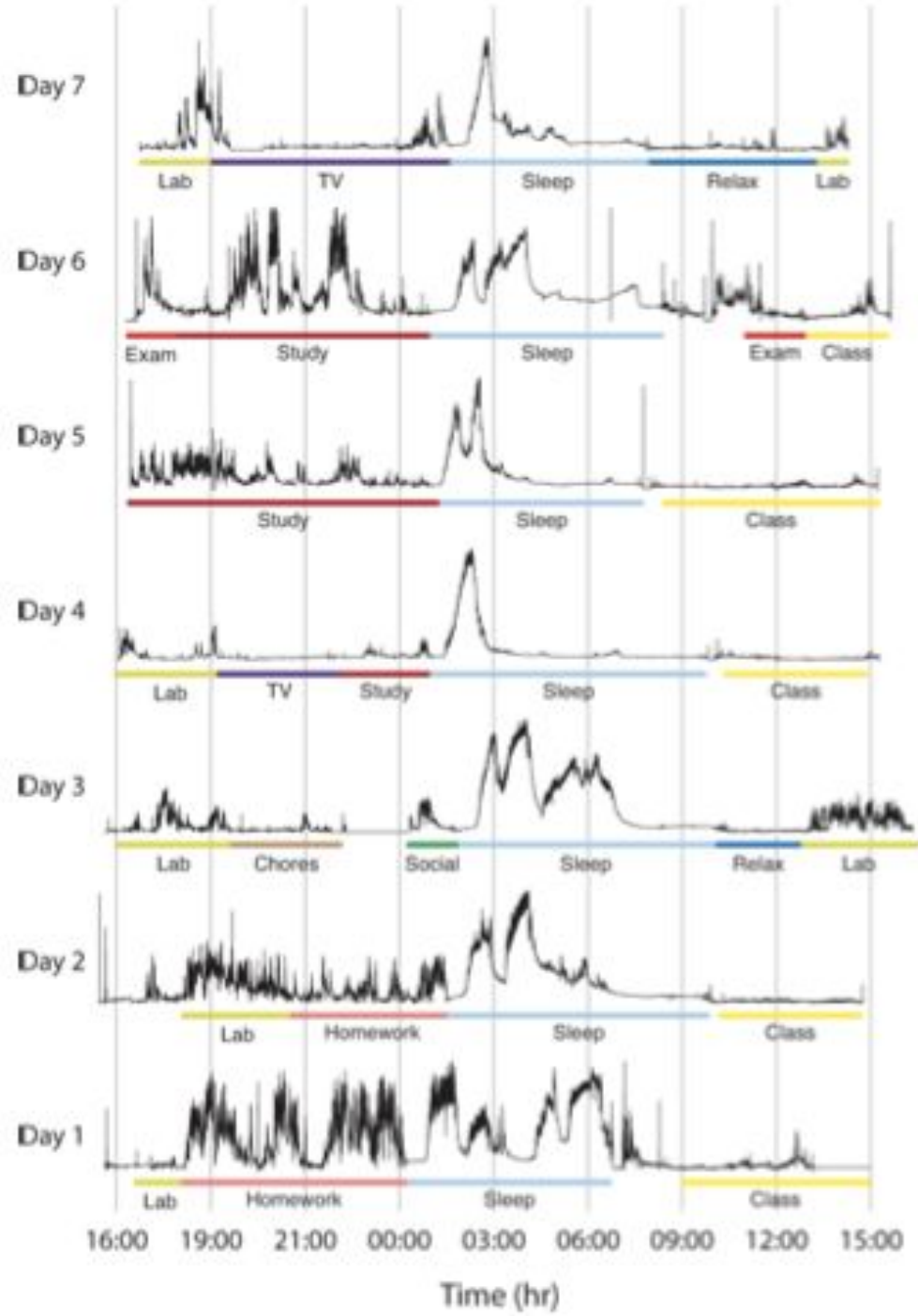
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# Traditional and Flipped Classrooms

**New** → **Known**

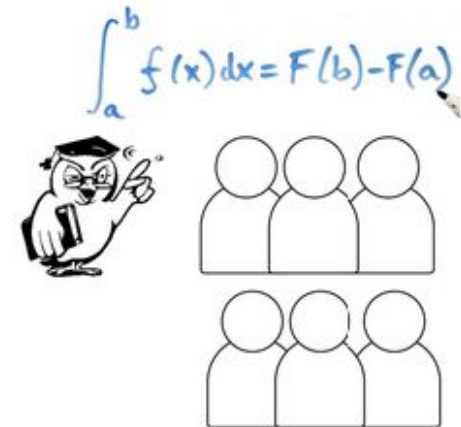
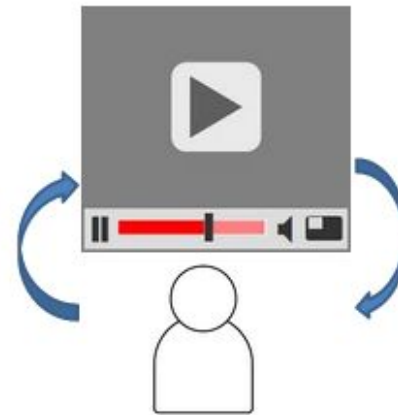


$$\int_a^b f(x) dx = F(b) - F(a)$$

Expert: "Flip to deliver instruction more efficiently..."

Colleague: "We've been doing this, but a lot better..."

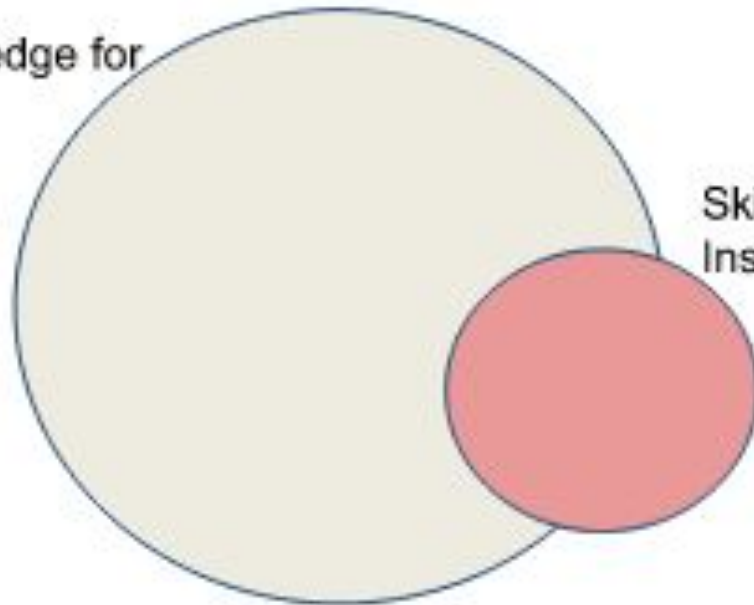
## "Flipped Classrooms"



# Instructionalism in the 21<sup>st</sup> Century

## “Flipped” & Traditional Classrooms

Skills and Knowledge for  
21st Century



Skills and Knowledge from  
Instructionalism

# Upside-Down Classrooms

## ▪ Nature of Learning

- Active engagement
- Social
- Emotional connection
- Attainable challenges
- Clear expectations
- Connections

## ▪ Role of Technology

- Embedded
- Blurred boundaries
- Virtual classrooms
- BYOD

# Six Models

## “Homework”

- Independent
- Gives context
- High interest
- “Easy”

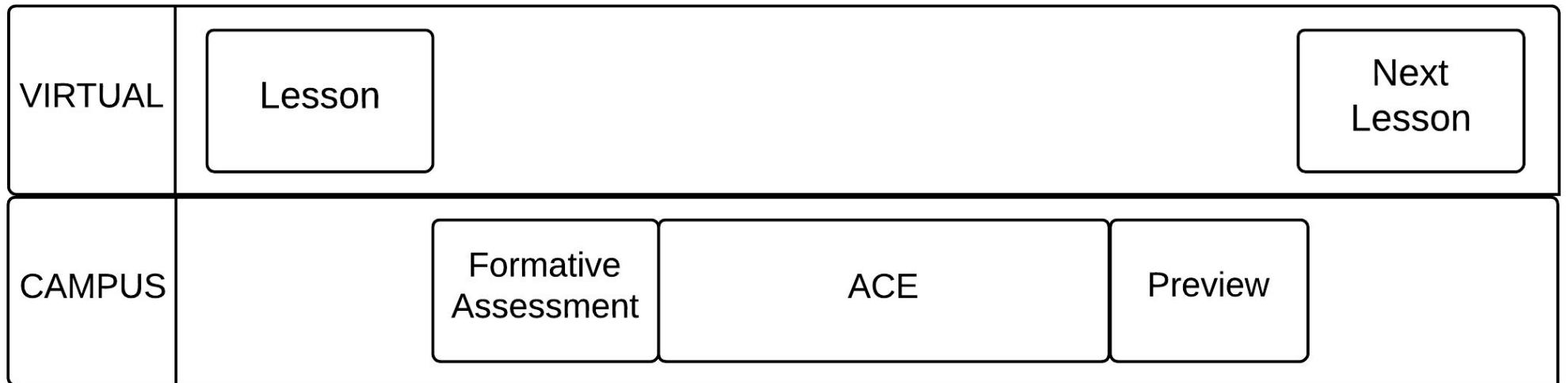


*inGenius: A Crash Course in Creativity*

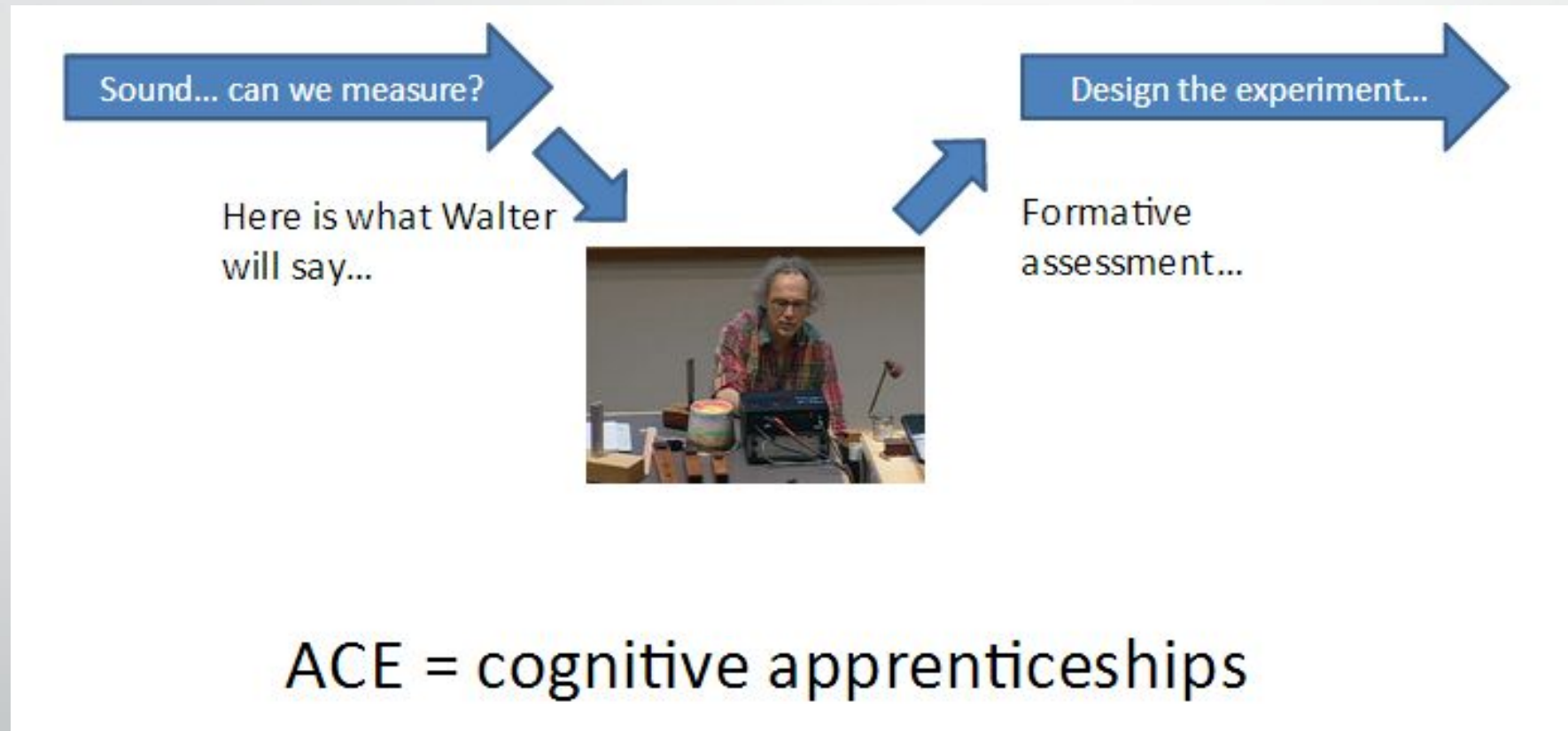
## “Face-to-Face”

- Apply, connect, extend
- Authentic learning
- Teacher as mentor

# Check-ACE-Preview

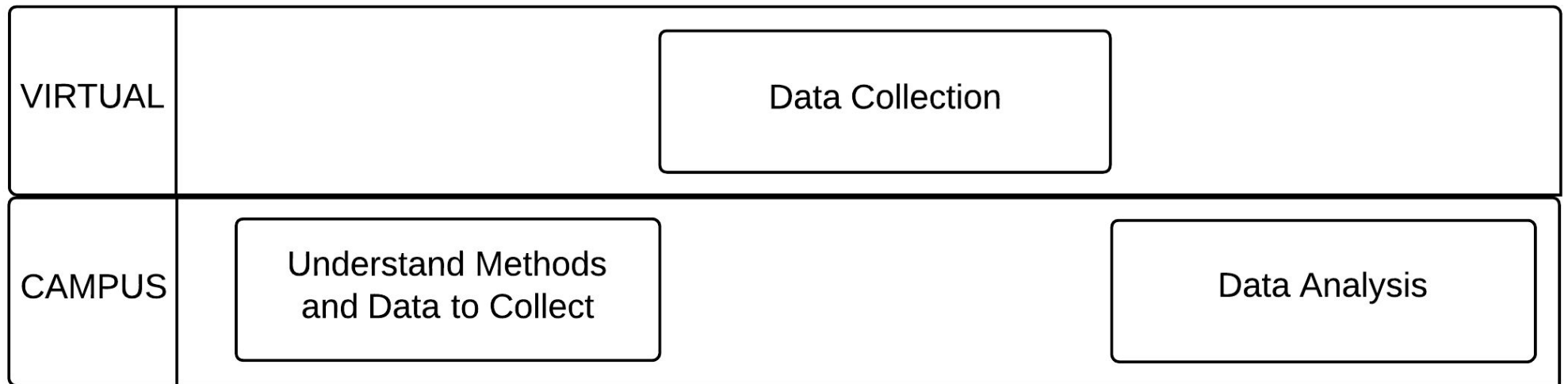


# C-ACE-P Example



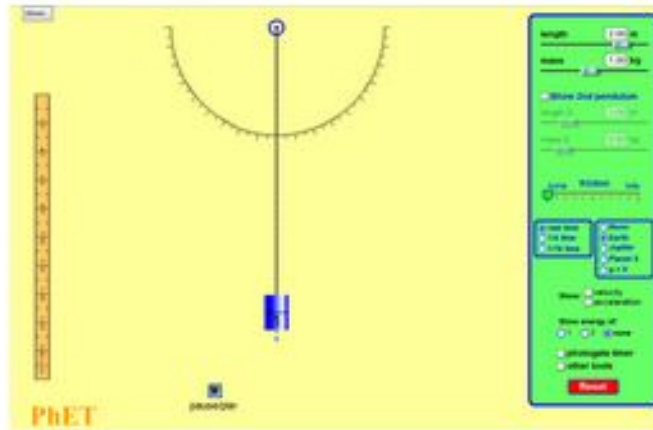
Learning of experiments not about experiments

# Data Collection



# Data Collection Example

Known



New



Pendulum data

File Edit View Insert Format Data Tools Help All changes saved in Drive

fx

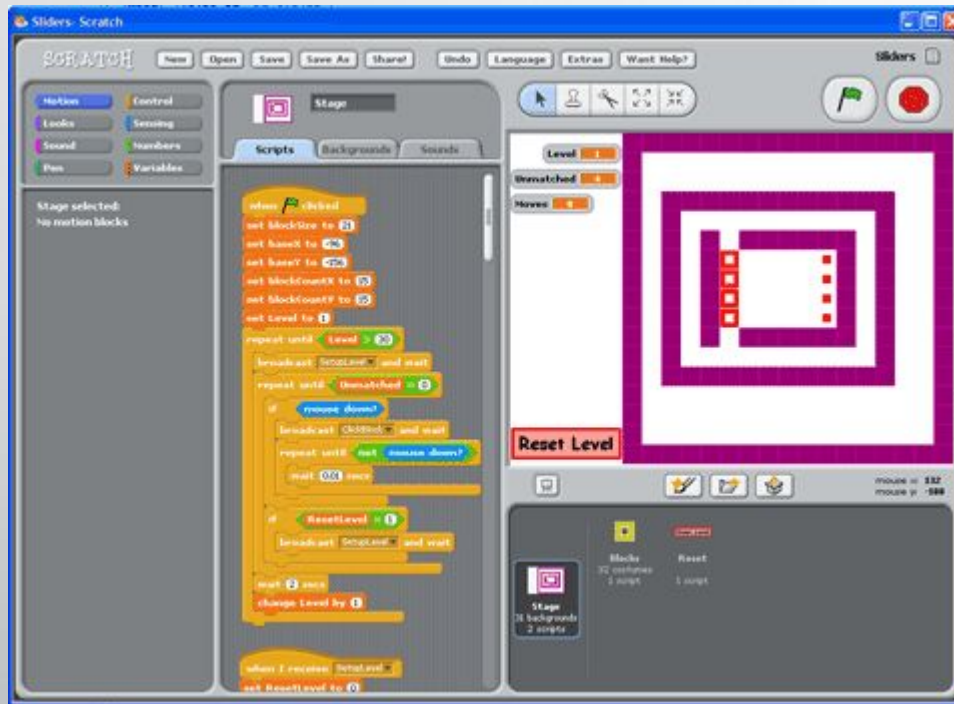
	A	B	C	D
1	Length of the pendulum (m)	Time for 10 swings (s)		
2				
3				
4				
5				
6				
7				
8				

$$T = 2\pi\sqrt{\frac{L}{g}}$$

# Quest

VIRTUAL	Individualized and Independent Instruction
CAMPUS	ACE Activities with Connection to the Quest Activities

# Quest Examples



*Codecademy*

**Learn to code  
interactively,  
for free.**

People all over the world are  
learning with Codecademy.  
Join in now!

# Context

VIRTUAL	<div data-bbox="754 639 1314 816">Read/ Research/ Watch</div>
CAMPUS	<div data-bbox="1319 873 2384 1051">Knowledge Building</div>

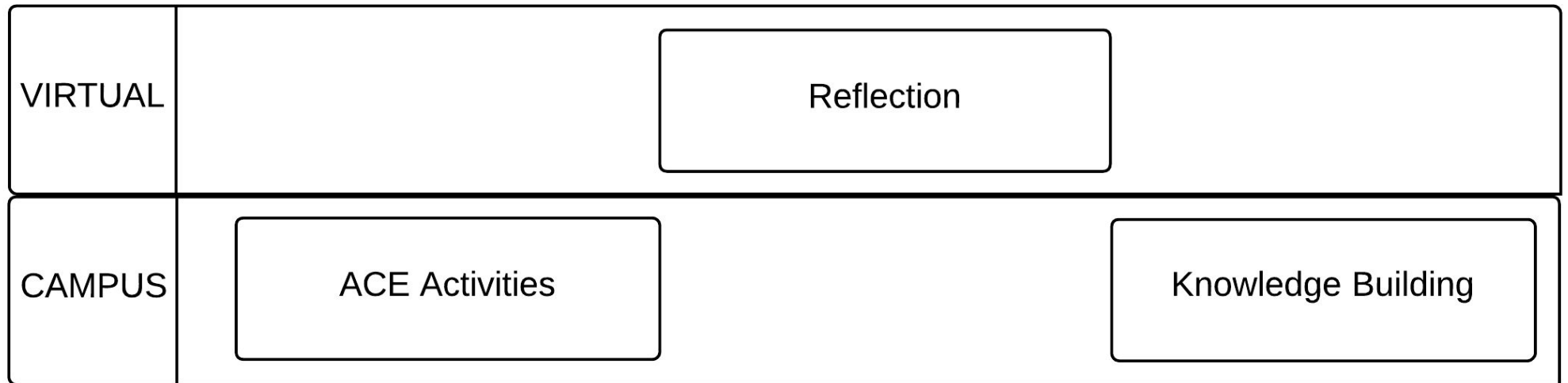
# Context Example

Experience

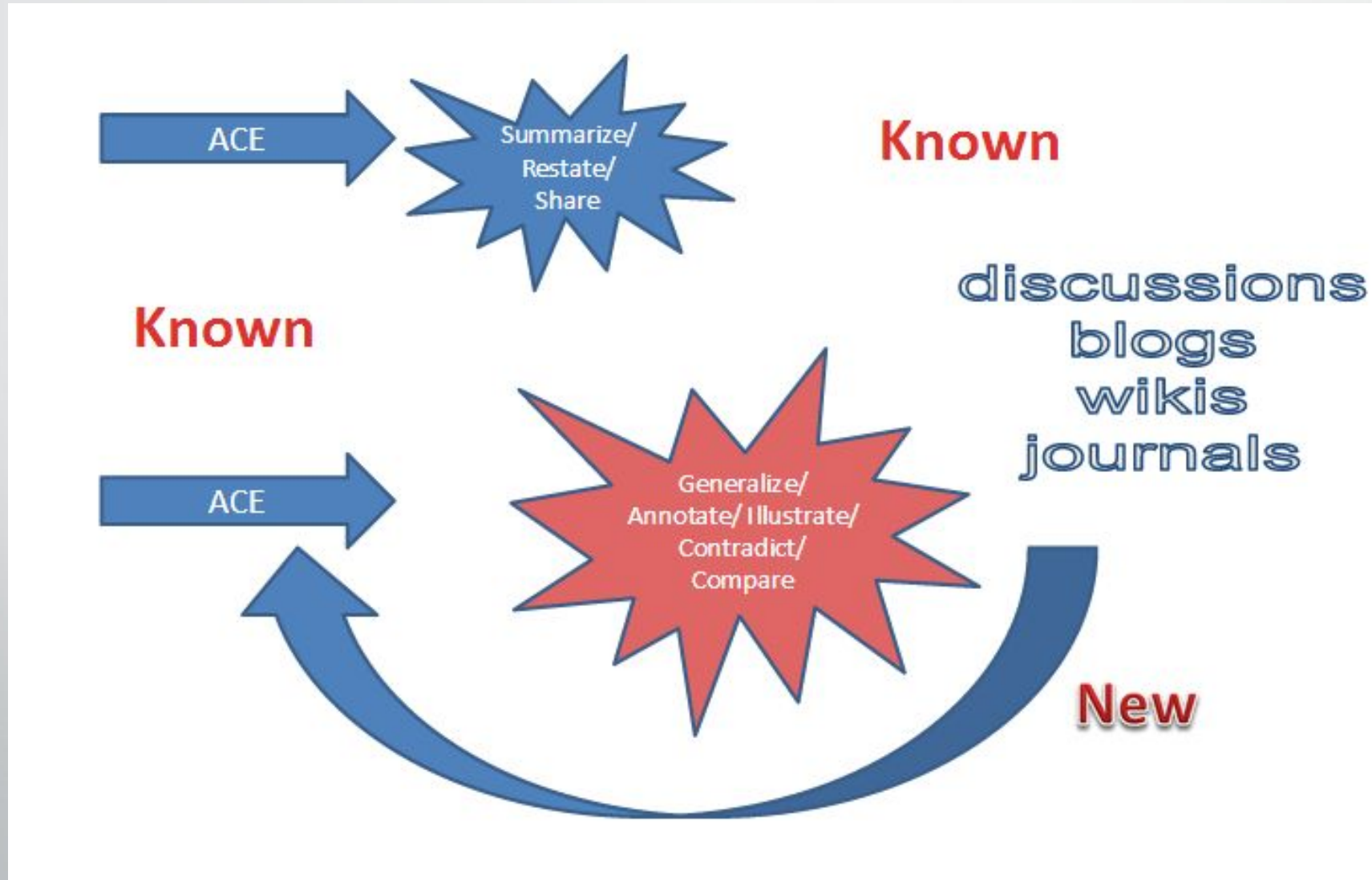


Find three poems...  
Rewrite them...

# Reflection



# Reflection in Virtual Classrooms



# Worked Examples

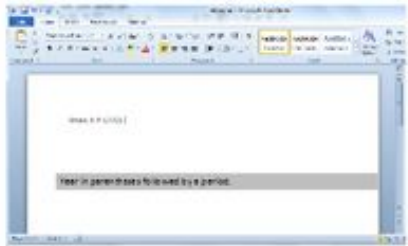
VIRTUAL	Collection Used as Needed
CAMPUS	ACE Activities with Connection to the Quest Activities

# Worked Examples

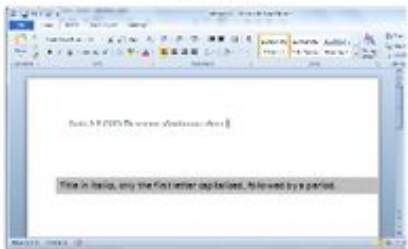
## 1) Author's last name and initials



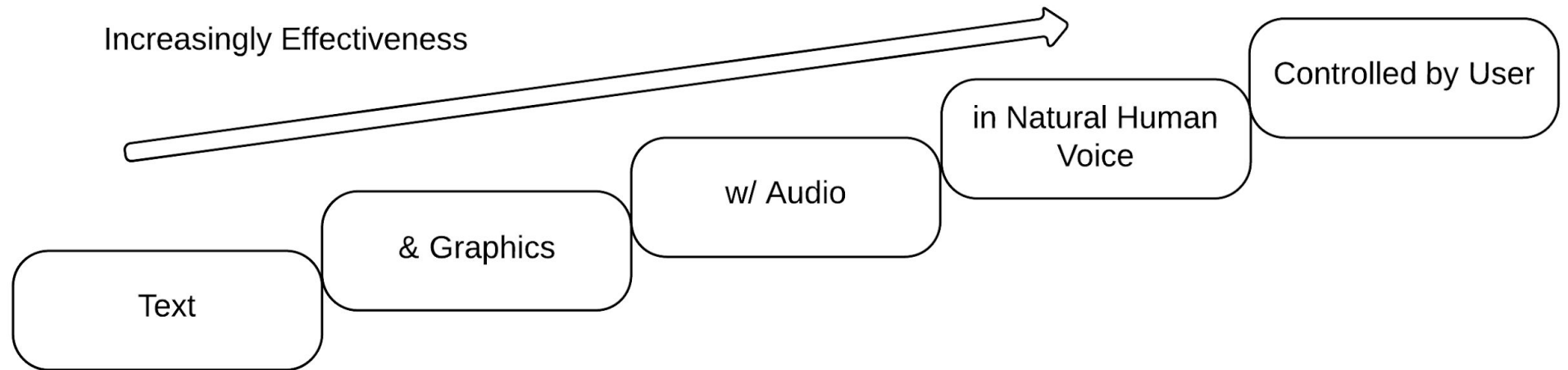
## 2) Year of publication



## 3) Title



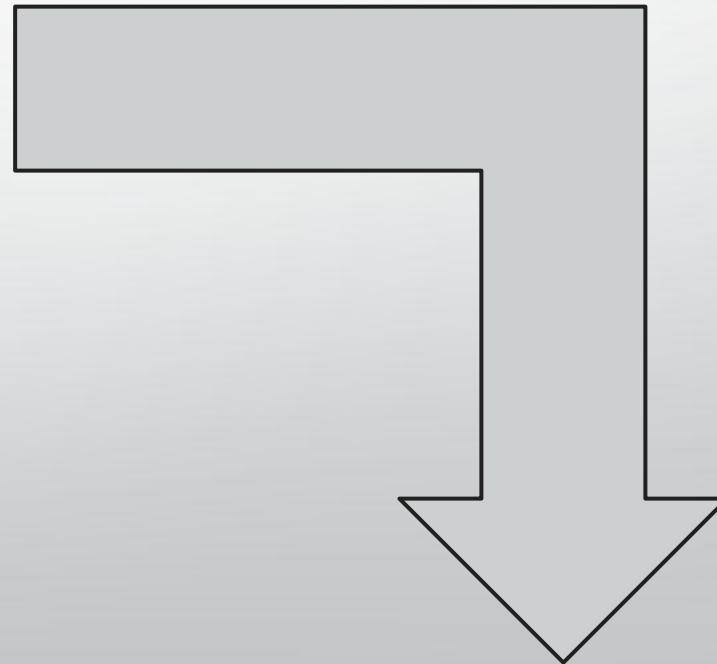
Increasingly Effectiveness



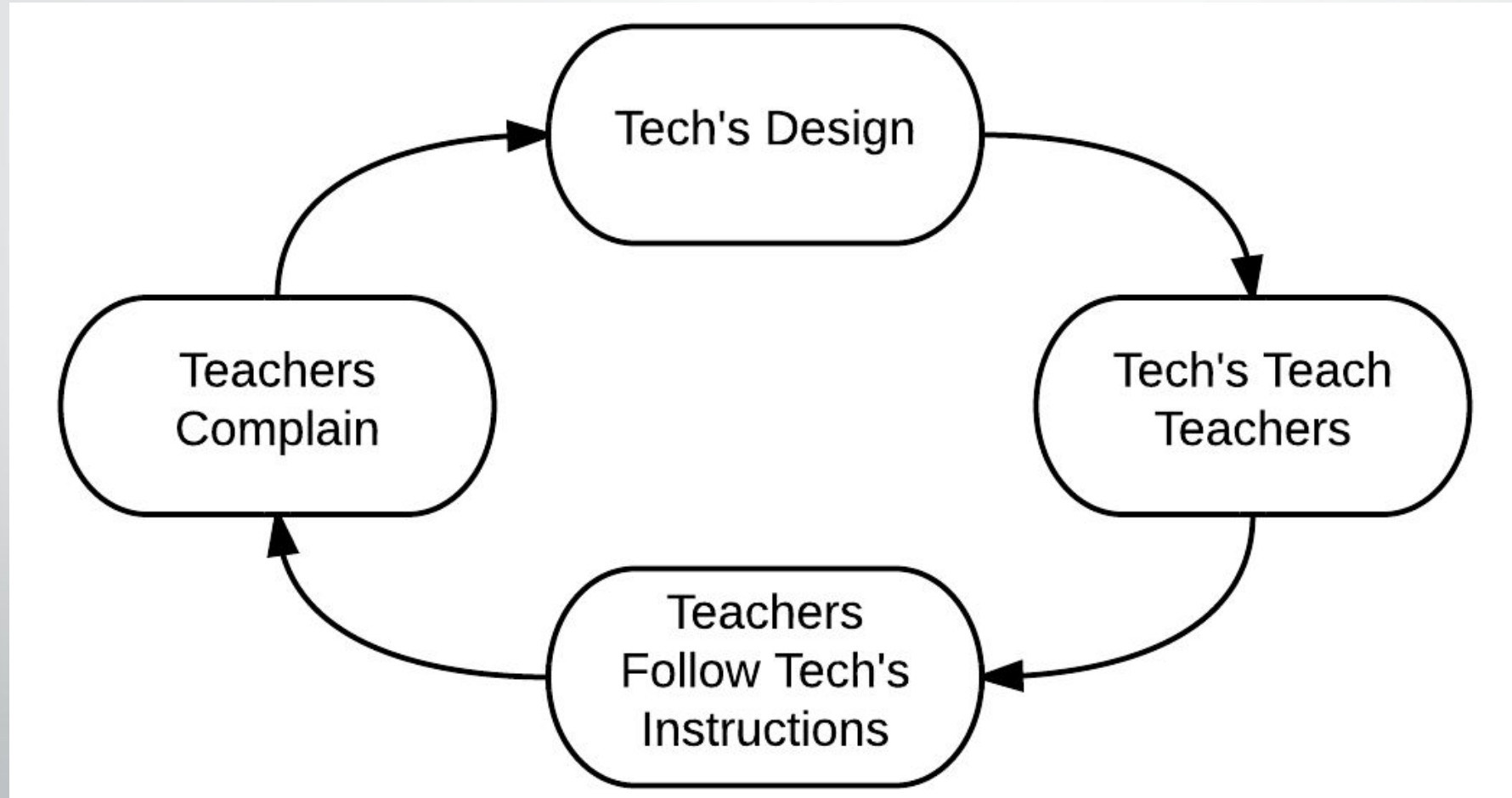
# Six Models

- 1) *Check-ACA-Preview*
- 2) *Data Collection*
- 3) *Quest*
- 4) *Context*
- 5) *Reflection*
- 6) *Worked Examples*

Tips/ Tools/ Strategies for Turning  
Classrooms Upside-Down



# To Implement the Six Models...



# Virtual Classroom (Not Sites)



Blackboard

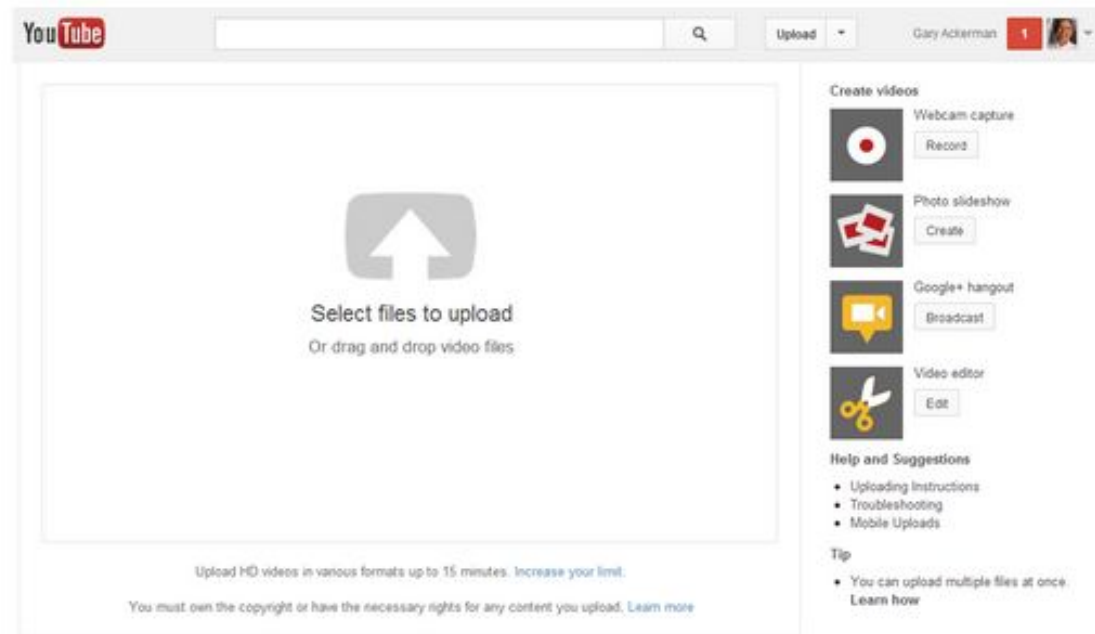


## Well-used system-wide virtual classrooms:

- Repository (shared among faculty)
  - Documents (collaborating)
  - Worked examples
  - Links to experiences
- Easy tests = quests
- Discussions, blogs, wikis, chat

# Easy Media Publishing

## Essential Technology: Easy Publishing



The screenshot shows the YouTube upload interface. At the top, there is a search bar, an 'Upload' button, and a user profile for 'Gary Ackerman'. The main area features a large grey arrow icon pointing upwards, with the text 'Select files to upload' and 'Or drag and drop video files'. Below this, there is a note: 'Upload HD videos in various formats up to 15 minutes. Increase your limit. You must own the copyright or have the necessary rights for any content you upload. Learn more'. On the right side, there is a 'Create videos' section with four options: 'Webcam capture' (Record), 'Photo slideshow' (Create), 'Google+ hangout' (Broadcast), and 'Video editor' (Edit). Below this is a 'Help and Suggestions' section with links for 'Uploading Instructions', 'Troubleshooting', and 'Mobile Uploads'. A 'Tip' section at the bottom right states: 'You can upload multiple files at once. Learn how'.

YouTube Language: English Country: Worldwide Safety: Off Help

About Press & Blogs Copyright Creators & Partners Advertising Developers  
Terms Privacy Policy & Safety Send feedback Try something new!

# Embed Media

**The Comment Panel**

**Comment Here:** In your own words, deconstruct the messages this work communicates to you about identity in American culture.

**I shop therefore I am**

- Record a voice comment with your telephone (free accounts are limited to 3 free phone minutes - 1 hour can be purchased for \$10)
- Record a video comment with your web cam
- Record a voice comment with a microphone
- Type a comment
- Upload a pre-recorded .mp3 audio comment (PRO Accounts Only)
- Click here to go to the next slide

Share this video **Embed** Email

```
<iframe width="420" height="315" src="//www.youtube.com/embed/I1wq1DNHbNU" frameborder="allowfullscreen"></iframe>
```

popplet **Whiteboard Blog Test**

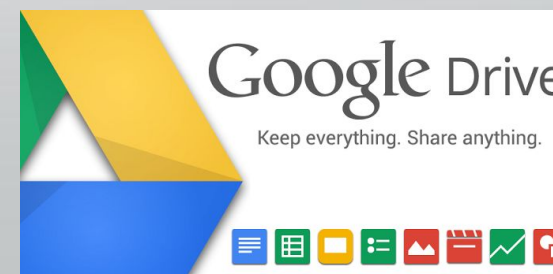
home view all zoom - +

Link ideas together

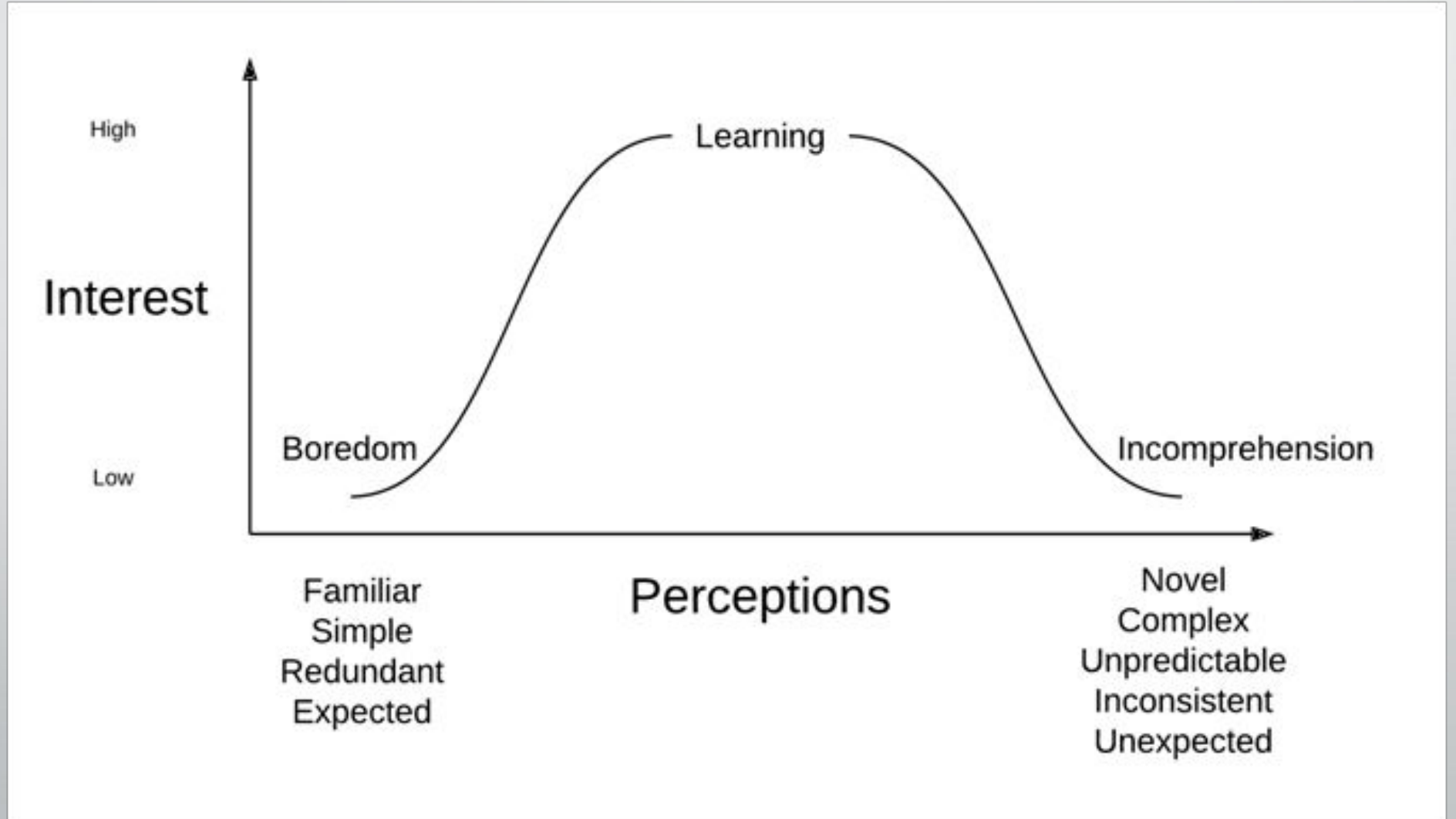
Testing testing

Add maps

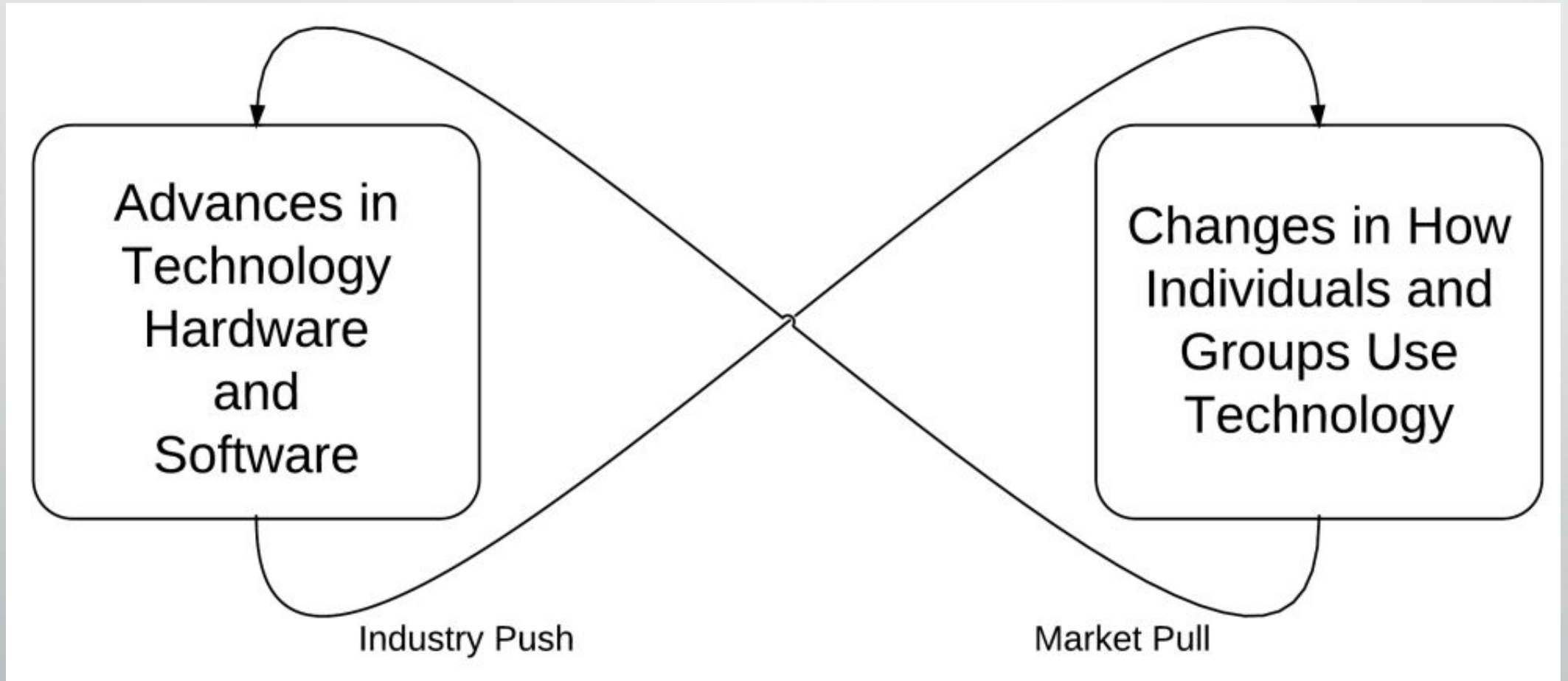
<https://drive.google.com>  
<http://www.popplet.com>  
<http://www.voicethread.com>



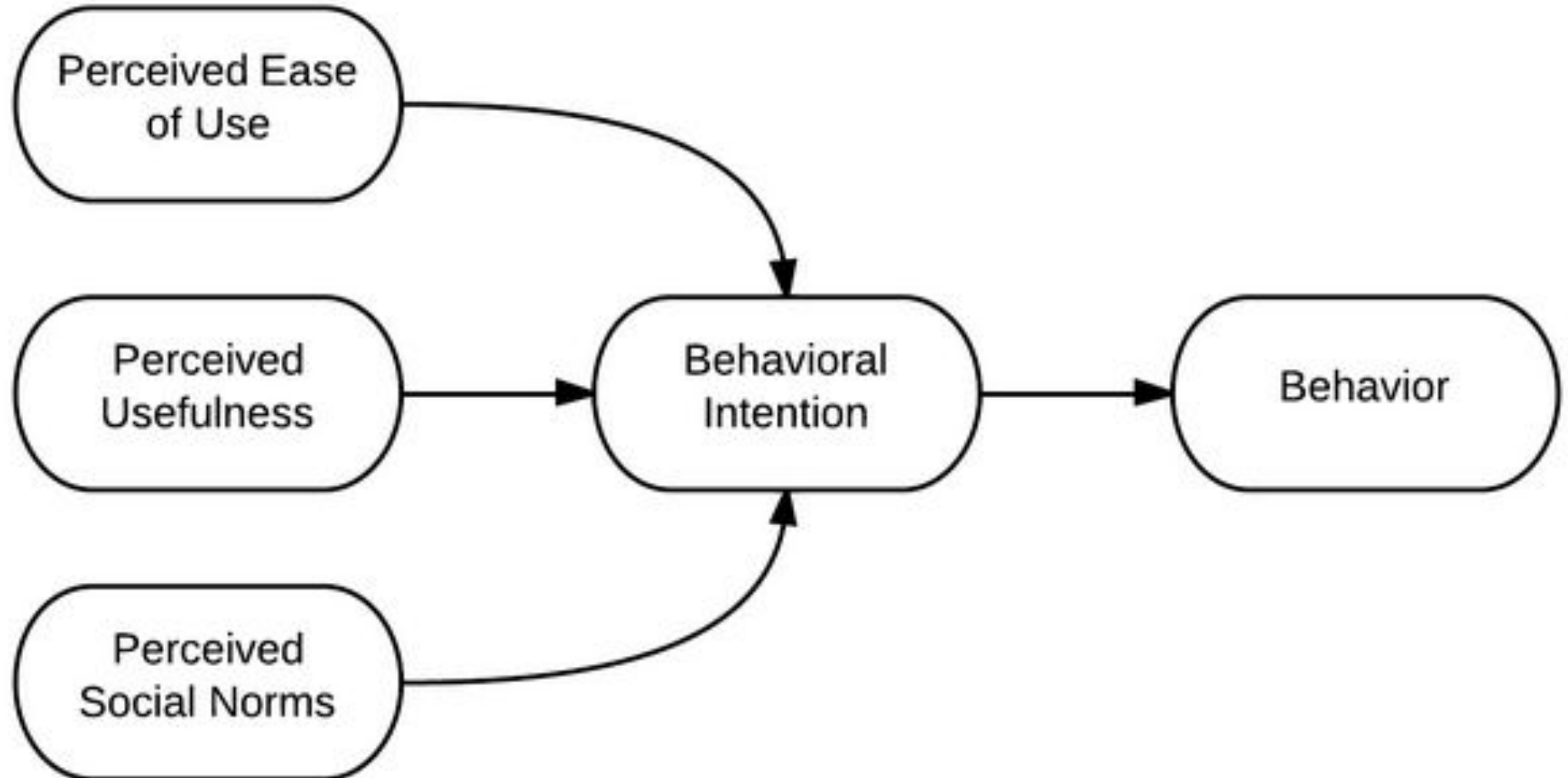
# Continuous Progress



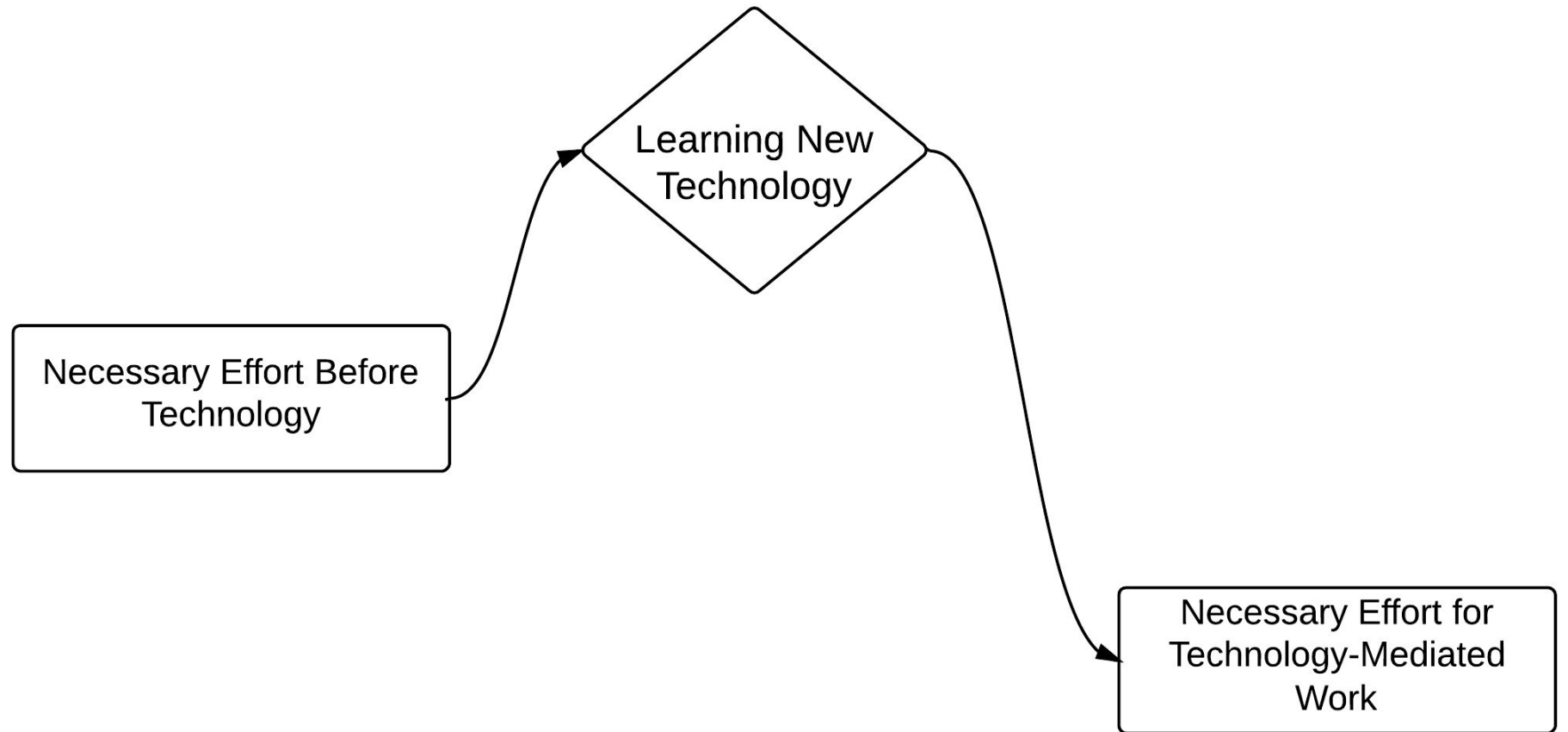
# Reflexivity



# Technology Acceptance



# Activation Energy



# Learning Sciences

## The Nature of Learning

Using Research to Inspire Practice

- ❖ Learners at the centre
- ❖ The social nature of learning
- ❖ Emotions as integral to learning
- ❖ Recognizing individual differences
- ❖ Stretching all students
- ❖ Assessment for learning
- ❖ Building horizontal connections

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These slides

126-page PDF

Link to book for iOS