Go to braincandy.org

Click on I AM A STUDENT.
Today’s code is: XXXX
Peer Instruction is the most popular research-based instructional practice among U.S. physics faculty (Henderson & Dancy, 2009).
The Peer Instruction (PI) cycle.
PI success at the postsecondary level.

Crouch & Mazur (2001)

Lorenzo, Crouch, & Mazur (2006)
The feedback loop.

Social Cognitive Theory (SCT) (Bandura, 1986)

1 Evidence
This radar-equipped sign flashes a car’s current speed.
Firstly, it’s effective — overwhelming behavior and pointesting that data back to the individual so they know where they stand. After all, you can’t change what you don’t measure.

4 Action
Drivers lower on average of 10 percent — enough for several miles.
The individual has to engage with all of the above and act—thus closing the loop and allowing that new action to be measured.

2 Relevance
The sign also triggers the legal speed limit — people that don’t match are given an alarm. Data is just digits unless it helps someone, through information design, social context, or some other piece of meaning, the right incentive will transform rational information into an emotional imperative.

3 Consequences
People are made of the consequences of speeding, including traffic tickets and the risk of accidents.
Even compelling information is useless unless it ties into some larger goal or purpose. People must have a sense of what to do with the information and any opportunities they will have to act on it.
Conceptual Learning Gains

Student Variations in Academic Performance and Demographics

LECTURE (PASSIVE)

OR

WRITING (CONSTRUCTIVE)

OR

PEER DISCUSSION (INTERACTIVE)

OR

WRITING + DISCUSSION (CONSTRUCTIVE + INTERACTIVE)

TIME BETWEEN CLICKER VOTES

OBERVE CLICKER VOTES

ANONYMOUS VOTE WITH CLICKER

OBERVE LECTURE

INDIVIDUALLY CONSIDER CONCEPTUAL QUESTION

ANONYMOUS VOTE WITH CLICKER

OBERVE VOTING RESULTS

?
How to make braincandy

1. You first need to sign up for your free account!

2. Visit www.braincandy.org

3. Click I AM A TEACHER from the menu at the top of the page.

4. You should now see:
Once you sign up for an account, click on CREATE A QUESTION.
How to make braincandy (continued).

On the left, form your question, on the right, see the preview.
Goals for Writing

A. Students **easily** understand the question

B. Nearly a flat distribution on the initial responses
How to deliver braincandy

1. Now we have a question or two, it’s time to present those questions.

2. Click CREATE A PRESENTATION.
How to deliver **braincandy**

1. Name your presentation (and provide an optional description, if you wish).

2. Choose if you’d like to share the presentation with others.

3. On the bottom left you can add questions to your presentation.
How to deliver braincandy (continued).

1. Students - Smart Devices, Computer
2. Instructors - Computer
3. Whole Class - Projector
How to deliver braincandy (continued).

1. From your HOME tab, click on your desired presentation. Next, click **LAUNCH PRESENTATION**.

2. Give students unique 4-character code.

3. Present questions.

4. Show and discuss results.
How to deliver braincandy (continued).
How to support students.

1. Present a Question (Ask for Students’ Prior Knowledge)
2. Show the Results (Questions with Varying Results are Best)
3. Ask Students to Discuss in Small Groups. Ask Them to Come to a Consensus
4. Re-Vote
How to connect with others.
Thank you!

More Questions?

Visit braincandy.org/faq

or

Email jbryanh@asu.edu