



Beyond, “Is everyone with me?”: Informal and Direct Assessment Techniques

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TODAY'S OUTCOMES

Participants will be able to:

1. Create (relatively) quick and easy assessments that can be used to provide feedback and guidance to support student development
2. Evaluate the appropriateness of an assessment.

ASSUMPTIONS

1. Learning is related to teaching/instruction.
2. Effectiveness is related to having clear goals/objectives.
3. Improving learning requires quality feedback.
4. Assessment of learning needs to fit the context in which learning takes place.

CRITERIA FOR SELECTING ASSESSMENT

- **Meaningful:** Will the assessment provide information about student achievement of the expected learning?
- **Actionable:** Will the assessment results be useful for identifying and addressing gaps in student learning?
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- **Appropriate:** Will the assessment be useful for evaluating and supporting learning of the content or skills that are being taught?

INFORMAL & DIRECT ASSESSMENTS

- Exit Ticket
- Google Quiz
- Affective Domain Checklist



EXIT TICKET

- A quick check on student ability by having them
 - summarize key points from the lesson and/or
 - solve a problem or apply a skill based on the lesson.
- A last chance for the instructor to emphasize significant points.
- An opportunity for students to self-assess.



EXIT TICKET

1. Decide what you'd like to find out about students' learning at the end of the class period.
 - a) Write a prompt or pose a problem and post for students to read.
 - b) Explain why they are doing this—why they should take it seriously.
2. Specify an amount of time for students to complete the Exit Ticket
 - a) Consider using 3x5 cards (limits length of response).
 - b) Collect the tickets as students leave the classroom.

EXIT TICKET EXAMPLES

Students will be able to analyze and interpret data

- ★ Researchers studied hours of sleep and energy expended on an exercise bike for 68 men and women ages 18 - 24. They were testing to see if people who slept more burned more calories during their exercise session.
- ★
- ★
- ★ Identify the levels of measurement and explain how you would test statistically.

Students will be able to explain basic scientific concepts

- ★ True, False, or Partially True – briefly explain your answer.
- ★ Your weight and mass will be the same on the Earth as on the Earth's moon.
- ★
- ★

Students will be able to relate disciplinary content to Naval applications

- ★ Briefly summarize (in a few sentences),
- ★ the 2 most important things you learned from today's session and how you'll use this information in the fleet.
- ★
- ★

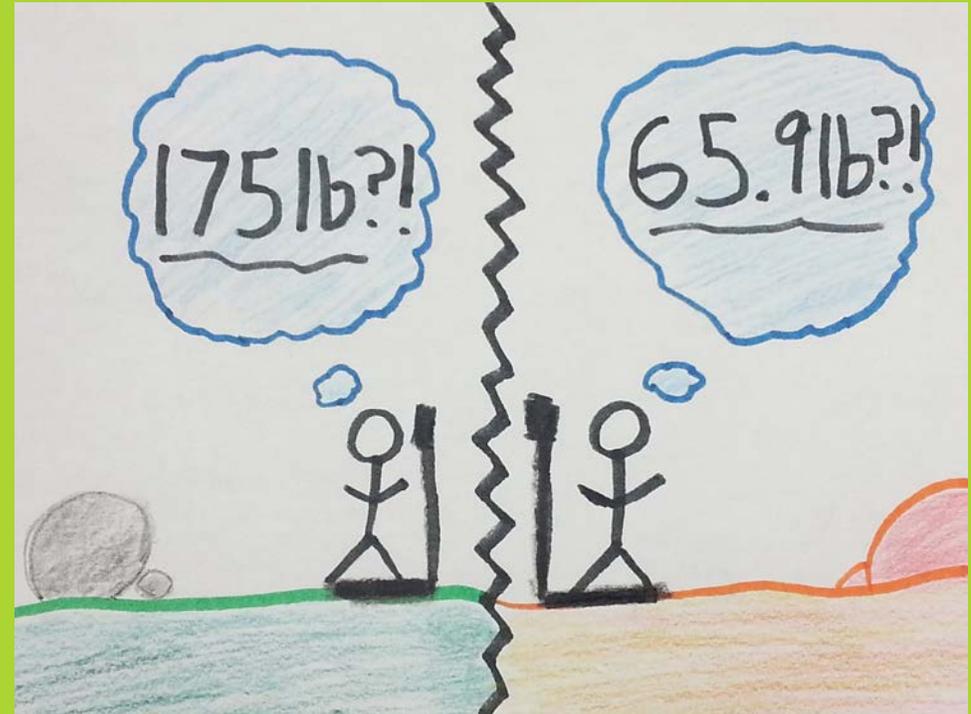
EXIT TICKET EXAMPLE ANSWER



Partially true:



Weight is a force acting on an object due to gravity and will change based on location, but mass remains the same.



EXIT TICKET SORTING

Review the responses and sort the tickets into piles:

Students
have
grasped and
can apply
concepts.

Students
can recall
facts, but
have
difficulty
applying
the
concepts.

Lack of
ability to
define or
apply

Other

EXIT TICKET

1. Consider results.
 - A. Is learning taking place // Is the program effective?
 - B. Are there ways to improve learning // the program?
2. Can the results be used to enhance learning.
 - A. Consider emailing the group with results, additional resources, and suggestions as appropriate.
 - B. Consider starting the next session with interesting ticket responses or with a chart that highlights responses.



Title: *The First Thanksgiving 1621*

By: J.L.G. Ferris

Date: 1932

Question: The painting *The First Thanksgiving 1621* helps historians understand the relationship between the Wampanoag Indians and the Pilgrim settlers in 1621.

Do you agree or disagree? (Circle one.)

Briefly support your answer:

Students will be able to analyze historical evidence.

Retrieved from Stanford History Education Group on April 26, 2018: <https://sheg.stanford.edu/history-assessments>

Undeveloped: Student ignores the painter's role in shaping this image and the 300 year gap between event and document creation.

True, because you can see how they are interacting with each other. Without any picture, you couldn't really see how the Wampanoag Indians and the Pilgrims interacted with each other.

Emerging: Student shows an understanding of the role of the creator in shaping a document's message, but doesn't indicate that other sources could be used to corroborate the depiction.

It is impossible to know whether this picture actually happened. Just one person drawing about it, doesn't mean it is true or that it actually happened.

Date is not mentioned.

Competent: Student identifies the key issue: the gap in time and why this limits the reliability of the painting as evidence.

Student distinguishes among types of sources

I disagree with this statement because this painting is not a primary source document. The painting was originally made in 1932, roughly 320 years after "The First Thanksgiving." Thus it is a secondary source document and should not be the main resource used to learn about this Thanksgiving or the relationship between the two. A good source to use might be Puritan letters during this time.

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GOOGLE QUIZ

Create and automatically grade quizzes in google forms.

- Step by step instructions:

gsuite.google.com/learning-center/products/forms/quizzes-get-started/

- Circuits Sample with images:

goo.gl/forms/EpomHMlf1PLhAuKa2

- Hypothesis Testing Sample:

goo.gl/forms/NU87yinsB1NTopcb2





<https://docs.google.com/forms/>

Start a new form

TEMPLATE GALLERY



Blank



Contact Information



RSVP



Party Invite



Recent forms

Owned by anyone



Untitled form

Opened May 10, 2017

AIR Proposal Forum Rubric

Opened Oct 14, 2016

Learning Outcomes Repo...

Opened Jul 17, 2015



Select settings 

GENERAL

PRESENTATION

Select quizzes 

QUIZZES



Make this a quiz

Assign point values to questions and allow auto-grading.

Quiz options

Release grade:



Immediately after each submission



Later, after manual review
Turns on email collection

Respondent can see:



Missed questions 



Correct answers 



Point values 



Settings

 SAVE

GENERAL

 Select
General

PRESENTATION

QUIZZES

Collect email addresses

Response receipts 

Requires sign in:

Limit to 1 response
Respondents will be required to sign in to Google.

Respondents can:

Edit after submit

See summary charts and text responses



Show progress bar

Shuffle question order

Show link to submit another response



Confirmation message:

Thank you for participating in the XXX review.

See how you did on the review session knowledge check by clicking "View your score" below.

If you still have questions remember we're here to help -- all you have to do is make an appointment in Starfish: [LINK HERE](#).

1.

3.

1. Enter quiz name and instructions
2 Enter prompt
3 Determine response type / enter options
4. Add image / video
5. Choose required
6. Duplicate or use + to add another question.
7. For auto grading and providing feedback select Answer Key.

2.

7.

QUESTIONS RESPONSES

Enter form/quiz name here

Select + to add a question.
Enter question prompt
Select question response type
Add images or videos (note: quizzes with these features used will not be mobile device)

Type prompt here

- Type answer options here
- and here
- and here
- Add option or [ADD "OTHER"](#)

- Short answer
- Paragraph
- Multiple choice
- Checkboxes
- Dropdown
- File upload
- Linear scale
- Multiple choice grid
- Checkbox grid
- Date
- Time

- 6.
- Tr
- 4.
-
-

6.

5.

ANSWER KEY (0 points)

Required



z name here

QUESTIONS RESPONSES

Choose correct answers:

Type prompt here

5 points

Type answer options here

and here

and here

ADD ANSWER FEEDBACK

EDIT QUESTION

INCORRECT ANSWERS

CORRECT ANSWERS

Enter feedback here and link to additional helpful resources

After section 1 Continue to next section

SAVE

1. Assign points.
2. Provide feedback for incorrect as well as correct answers.
3. Add links to helpful resources.
4. Then preview your efforts.
5. Select SEND to administer the quiz

Provide formative feedback as well as collecting information.

Enter form/quiz name here

Select + to add a question.
Enter question prompt
Select question response type
Add images or videos (note: quizzes with these features used will not be mobile device compatible)

Type prompt here

5 points

- Type answer options here
- and here
- and here

NEXT

In preview you can try out your quiz. Your responses will be saved.

Send form

Collect email addresses

Send via   

Link

<https://goo.gl/forms/lqSPpHnYdvP0vHev1>

Shorten URL

Send by email, share a link or embed in a webpage



CANCEL COPY

Try it out before sending it out.

Review Session Wrapper: circuits, conductors, and insulators

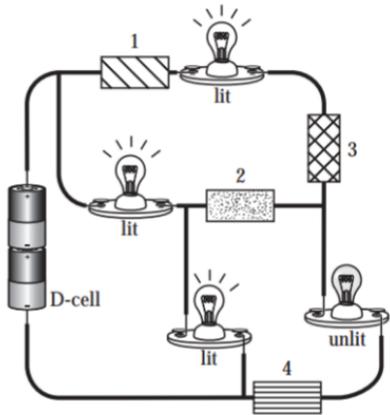
Please answer the following items, you will receive feedback after submitting your answers.

Email address *

Valid email address

This form is collecting email addresses. [Change settings](#)

1) The circuit diagram shows batteries connected to four light bulbs and four different materials labeled 1, 2, 3, and 4. Which of the four materials is an insulator rather than a conductor? *



Review Session Wrapper: circuits, conductors, and insulators

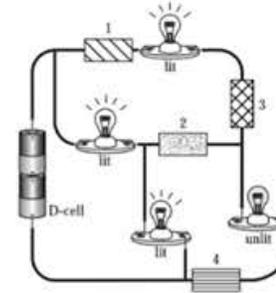
Total points 0/2 ?

Please answer the following items, you will receive feedback after submitting your answers.

Email address *

cermak@usna.edu

✕ 1) The circuit diagram shows batteries connected to four light ^{0/1} bulbs and four different materials labeled 1, 2, 3, and 4. Which of the four materials is an insulator rather than a conductor? *



- 1 ✕
- 2
- 3
- 4

Correct answer

4

Feedback

In order for the light to come on the circuit must be closed. Trace the circuit through the unlit light to determine which material is not conducting electricity.

Feedback to help learners.

Feedback to evaluate learning.

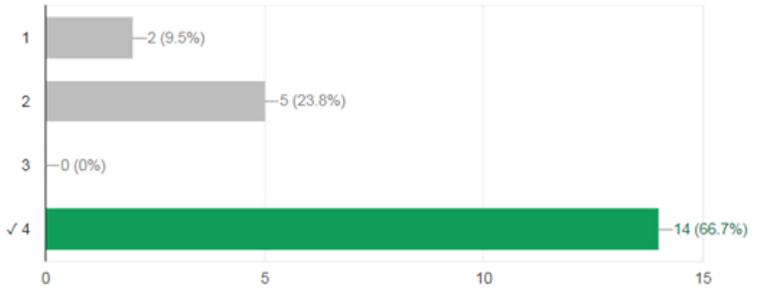
21 responses

SUMMARY QUESTION INDIVIDUAL

Accepting responses

1) The circuit diagram shows batteries connected to four light bulbs and four different materials labeled 1, 2, 3, and 4. Which of the four materials is an insulator rather than a conductor?

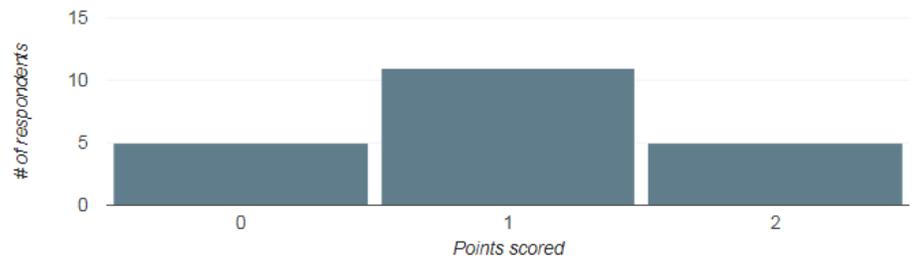
14 / 21 correct responses



Insights

Average 1 / 2 points Median 1 / 2 points Range 0 - 2 points

Total points distribution



Frequently missed questions ?

- 2) Select the BEST object from the list to complete the circuit and light the bulb.
- How much time do you plan to spend preparing for the XXX 6 week exam?

Correct responses
7 / 21
0 / 19

Review Session Wrapper: Circuits, Conductors, and Insulators (Responses)

	A	B	C	D	E	F	G	H	I	J	K
1	Timestamp	Email Addresses	Score	1) Which of these best completes the circuit?	1) The circuit diagram shows batteries connected to four light bulbs and four different materials labeled 1, 2, 3, and 4. Which of the four materials is an insulator rather than a conductor?	2) Select the BEST object from the list to complete the circuit and light the bulb.	How much time do you plan to spend preparing for the XXX 6 week exam?	To what extent do you plan to use the following techniques to prepare for the XXX 6 week exam? [Reading the assigned portions of the textbook.]	To what extent do you plan to use the following techniques to prepare for the XXX 6 week exam? [Skimming sections of the textbook.]	To what extent do you plan to use the following techniques to prepare for the XXX 6 week exam? [Reviewing homework/lab solutions]	To what extent do you plan to use the following techniques to prepare for the XXX 6 week exam? [Working on problems]
2	12/29/2017	cermak@	3 / 3	Copper nail	4	Cotton string soaked in salt water	At least 4 hours, but less than 6	None	A little	A little	A lot
3	12/29/2017	cermak@	3 / 3	Copper nail	4	Cotton string soaked in salt water	At least 2 hours, but less than 4	A little	A little	None	Some
4	12/29/2017	cermak@	1 / 3	Glass rod	2	Cotton string soaked in salt water	More than 10 hours	None	A lot	A lot	A lot
5	12/29/2017	cermak@	2 / 3	Copper nail	2	Cotton string soaked in salt water	At least 4 hours, but less than 6	A lot	A lot	A lot	A lot
6	12/29/2017	cermak@	1 / 3	Glass rod	4	Distilled water	At least 4 hours, but less than 6	Some	A little	Some	A little
7	12/29/2017	cermak@	3 / 3	Copper nail	4	Cotton string soaked in salt water	At least 4 hours, but less than 6	None	Some	Some	Some
8	12/29/2017	cermak@	2 / 3	Copper nail	4	Distilled water	At least 2 hours, but less than 4	None	Some	A little	A little
9	12/29/2017	cermak@	0 / 3	Glass rod	2	Distilled water	At least 2 hours, but less than 4	A lot	None	None	A little
10	12/29/2017	cermak@	2 / 3	Copper nail	4	Distilled water	Less than 1 hour	None	None	None	None
11	12/29/2017	cermak@	2 / 3	Copper nail	4	Distilled water	More than 10 hours	Some	Some	Some	Some
12	12/29/2017	cermak@	2 / 3	Copper nail	4	Distilled water	At least 8 hours, but less than 10	None	A little	Some	A lot
13	12/29/2017	cermak@	0 / 3	Glass rod	2	Distilled water	At least 2 hours, but less than 4	A lot	Some	A little	None

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AFFECTIVE DOMAIN CHECKLIST

- Affective domain refers to motivations, attitudes, and behaviors.
- Difficult to assess.
- Useful for developing independent learners.

AFFECTIVE DOMAIN CHECKLIST

Checklists:

- List expected behaviors / attitudes / skill development.
- Serve to clarify expectations.
- Can be used by the instructor (expert observer) and/or the learner (self-monitor).

SAMPLE CHECKLIST FOR INDEPENDENT LEARNING

	Consistent	Developing	Needs Work	Comments
Sets goals. (Sets achievable goals, has appropriate milestones, and clear targets)				
Prepares for sessions. (Reads or attempts tasks before seeking help / Diagnoses areas where assistance is needed / Identifies resources)				
Applies self to actively learning content. (Actively listens / Restates in own words / Evaluates problems and checks work)				
Self confidence in learning. (Explains answers / Identifies strengths and weaknesses and seeks to improve)				

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RESOURCES

- Angelo, T, and Cross, K.P. Classroom assessment techniques. San Francisco: Jossey-Bass. (1993).
- Google. "Getting Started with Google Quizzes" Web: gsuite.google.com/learning-center/products/forms/quizzes-get-started, retrieved 29 Dec. 2017.
- Keeler, Alice. "8 Google Forms Formative Assessment Tips" Web: alicekeeler.com/2014/10/20/google-form-formative-assessment-tip, retrieved 29 Dec. 2017.
- Kim, Dong-gook. "Using Google Forms for Student Engagement and Learning," *EDUCAUSE Review*, no. 3 (March 29, 2011). Retrieved: 29 Dec. 2017.

???

The background is a teal-to-blue gradient. In the corners, there are decorative white and light blue circuit-like patterns consisting of lines and circles.

Additional Slides

REPORTING RESULTS

Outcome	# of mids	# that fail to meet expectations	# meeting minimal expectations	# fully meeting expectations	% that met expectations
1) Students will be able to reason statistically // Think critically					
2) Students will be able to solve problems by recalling and applying basic concepts // Identify and apply concepts.					

This rolls into final reporting:

For all data collected (e.g., direct observation of student ability/expert observations, indirect survey/interview of satisfaction/perceptions of ability) **provide a short narrative** indicating collection method, sample vs population, how the assessment relates to the program outcome, an interpretation of the results, and follow-on actions if any.

ASSESSMENT CYCLE

1) Select learning outcome(s) to be assessed.

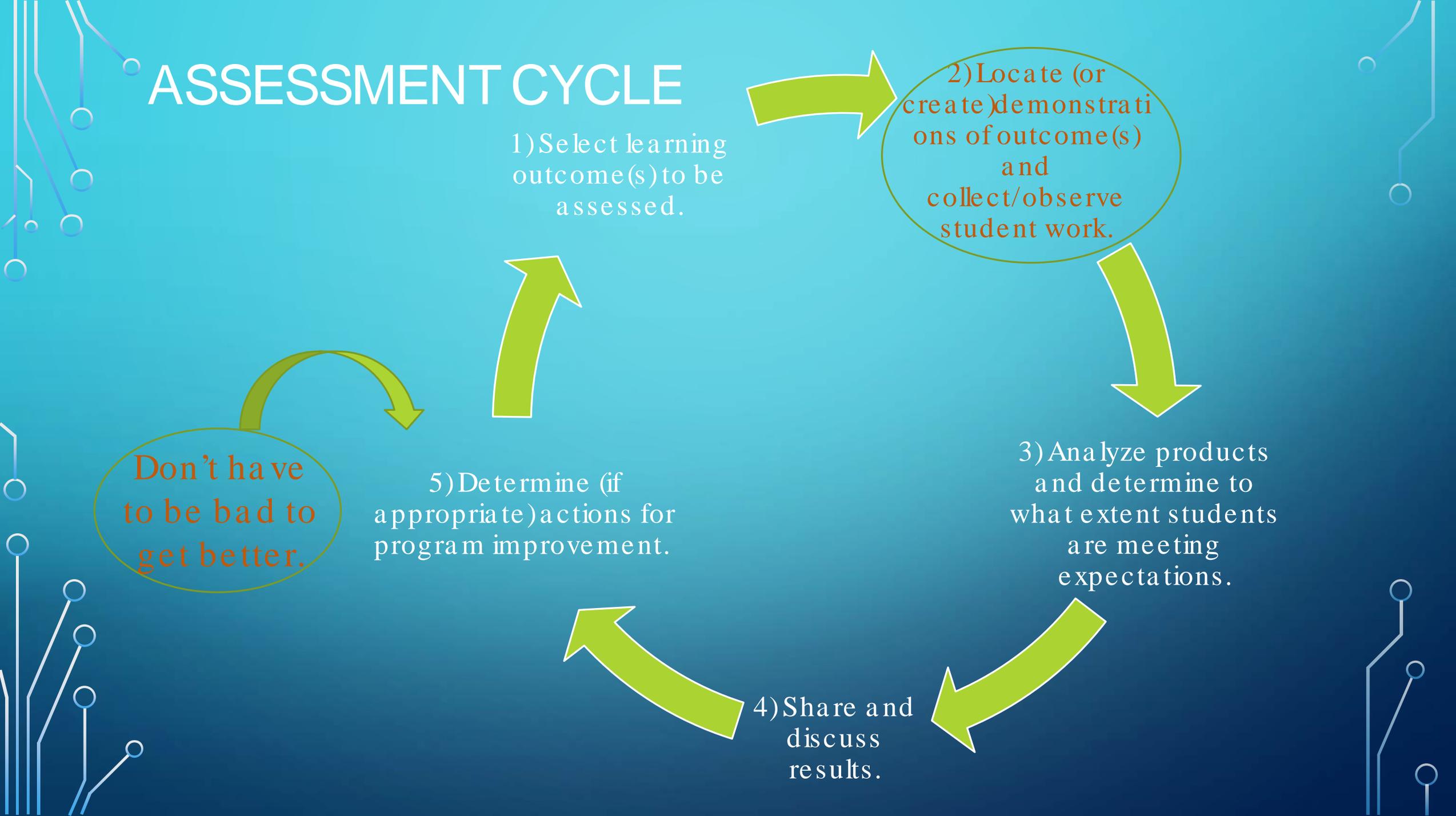
2) Locate (or create) demonstrations of outcome(s) and collect/observe student work.

3) Analyze products and determine to what extent students are meeting expectations.

4) Share and discuss results.

5) Determine (if appropriate) actions for program improvement.

Don't have to be bad to get better.



CLASSROOM RESPONSE SYSTEMS

- Google quizzes can be used as a classroom response system.
- Polling software (Pollanywhere.com: free and no specialized hardware/clickers).
- 3x5 cards.
- Turning Point (CTL/Dr. Zhu can help departments evaluate and contact vendor for licensing information)

3



FREE ACCOUNTS AT POLLEVERYWHERE.COM



Create your account

First name

Last name

Email

Password

Estimated audience size

Phone

What country will people be texting us from?

United States [Coverage Details...](#)

[» Show more countries...](#)

Create my Poll Everywhere account

By proceeding you agree to Poll Everywhere's
[Terms of Service](#) and [Privacy Policy](#).

The Base Plan includes

- 1 user
- All poll types and surveys

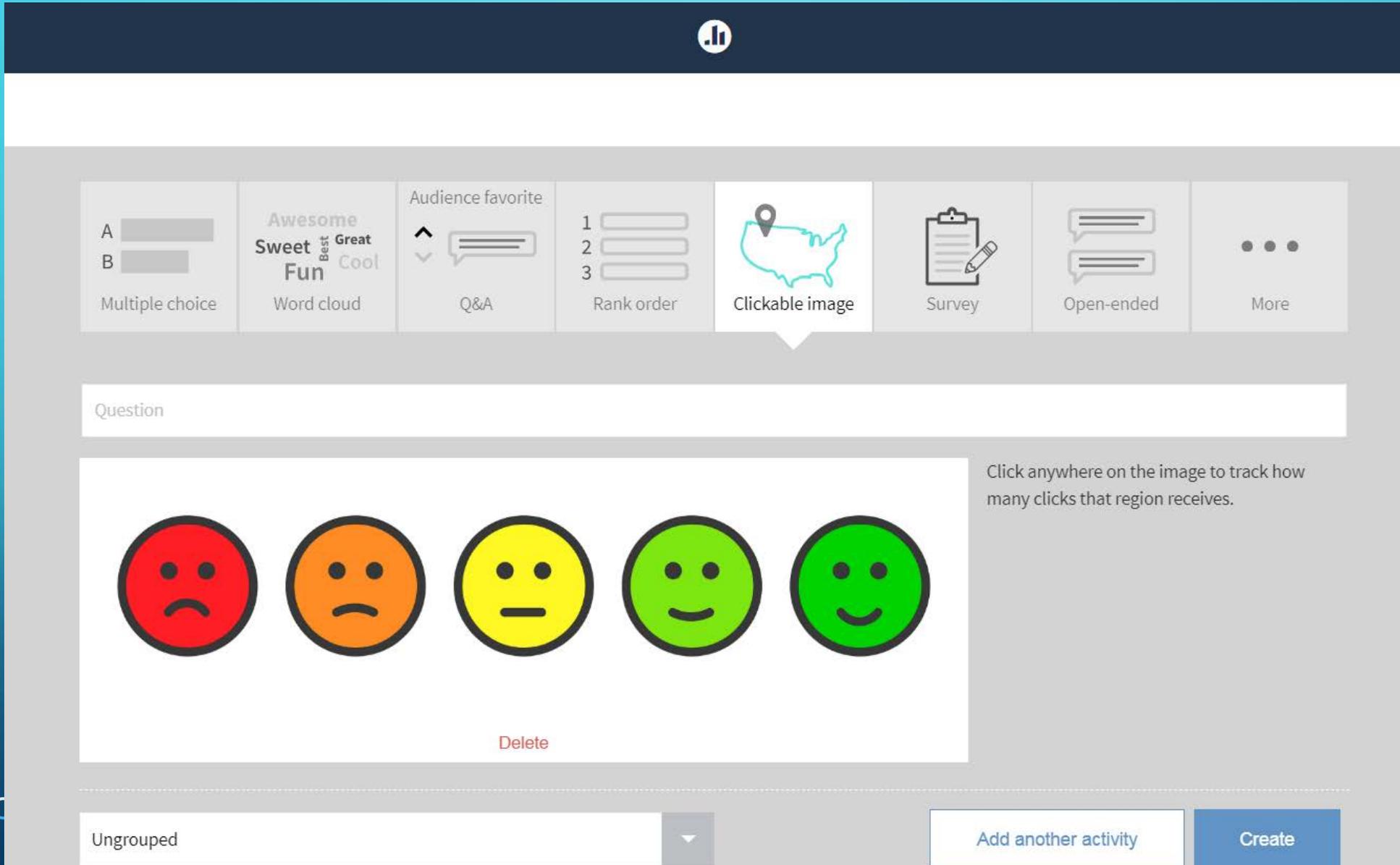
Who uses Poll Everywhere?

The world's leading companies incorporate Poll Everywhere to engage their audiences and employees.



Free accounts for Higher Education
limit 40 responses per poll!

CHOOSE YOUR QUESTION TYPE



The screenshot displays a survey creation interface with a dark blue header containing a bar chart icon. Below the header is a horizontal menu of question types: Multiple choice, Word cloud, Q&A, Rank order, Clickable image (highlighted with a white tooltip), Survey, Open-ended, and More. The 'Clickable image' tooltip contains a map of the United States and the text: 'Click anywhere on the image to track how many clicks that region receives.' Below the menu is a 'Question' input field. The main content area shows a row of five smiley faces representing a Likert scale: red (sad), orange (neutral), yellow (neutral), light green (happy), and dark green (happy). A 'Delete' button is centered below the smiley faces. At the bottom, there is a 'Ungrouped' dropdown menu, an 'Add another activity' button, and a 'Create' button.

Audience favorite

Multiple choice

Word cloud

Q&A

Rank order

Clickable image

Survey

Open-ended

More

Question

Click anywhere on the image to track how many clicks that region receives.

Delete

Ungrouped

Add another activity

Create

ENTER PROMPT AND RESPONSES

Polls

Participants

Reports



Pricing & Upgrades

Help

Verizon

KCERMAK446



Type a question to ask the audience, or

[Use an example](#)

Q&A

1
2
3
Rank order

Clickable image

Survey

Open-ended

More

Question

(Text, Image URL, LaTeX)

(Text, Image URL, LaTeX)



Ungrouped

Add another activity

Create

CONFIGURE YOUR POLL

Polis Participants Reports



Pricing & Upgrades Help New features KCERMAK446

Researchers studied hours of sleep and energy expended on an exercise bike for 100 men ages 18 - 65. Identify the antecedent variable.



Respond at PollEv.com/kcermak446 Text **KCERMAK446** to **37607** once to join, then **A, B, C, or D**

Age **A**

Hours of sleep **B**

Gender **C**

Calories expended **D**

1. Configure 2. Test 3. Present

How people can respond

Audience restriction & identity

Who can participate?

- Everyone - no restrictions
- Restrict to registered participants only (?)

How do you want to identify participants?

- Auto-generated ID (?)
- Completely anonymous ⚠ Careful

Response settings

Schedule lock/unlock times

Edit Export Delete

SELECT POLL SETTINGS

My settings

Participant registration

International text messaging

Response history

Features lab

Download the app

Use the app to embed polls in your slides.

Select your presentation software to start the download.

 Powerpoint

 Google Slides

Poll settings

Personal info

Poll settings

Template poll

Set

How long do you want your polls to stick around after you activate them? (?)

30 days

Participant screen names (?)

- Ask participants to enter a screen name before they respond to a poll
- Do not ask participants to enter screen names (auto-generated IDs will be used to track responses)

When should correct responses be visible to participants? (?)

Never

- Never
- Immediately
- 3 hours after response
- 1 day after response
- 1 week after response
- 30 days after response

English

Suggestions? [Let us know](#) how we can improve these translations.

Save

Cancel all changes

Your Account

You are on the **Base Plan**. [Click here for more information about your account.](#)

Registrations

You are a participant of 1 organization.

Your responses are usually anonymous. [Register](#) to let someone see that your answers came from you, or [manage your registrations](#) to revoke your identity.

Researchers studied hours of sleep and energy expended on an exercise bike for 100 men ages 18 - 65. Identify the antecedent variable.

Respond at [PollEv.com/kcermak446](https://www.poll Everywhere.com/kcermak446) Text **KCERMAK446** to **37607** once to join, then **A, B, C, or D**

Why do participants text to that weird phone number (“22333” or “37607”)?

That number is a "short code" and it will *not* bill anything besides standard rate text messages to a participant's mobile phone bill. The short code is used specifically for text messaging.

How can participants elect to never receive text message replies (confirmations) from Poll Everywhere?

Text **STOP** to the number provided (“22333” or “37607”).

SHARE YOUR POLL

Researchers studied hours of sleep and energy expended on an exercise bike for 100 men ages 18 - 65. Identify the antecedent variable.

Respond at [PollEv.com/kcermak446](https://www.poll-ev.com/kcermak446) Text **KCERMAK446** to **37607** once to join, then **A, B, C, or D**

Age

A

Hours of sleep

B

Gender

C

Calories expended

D

SHARE YOUR RESULTS

Researchers studied hours of sleep and energy expended on an exercise bike for 100 men ages 18 - 65. Identify the antecedent variable.

Respond at [PollEv.com/kcermak446](https://www.poll-ev.com/kcermak446) Text **KCERMAK446** to **37607** once to join, then **A, B, C, or D**

