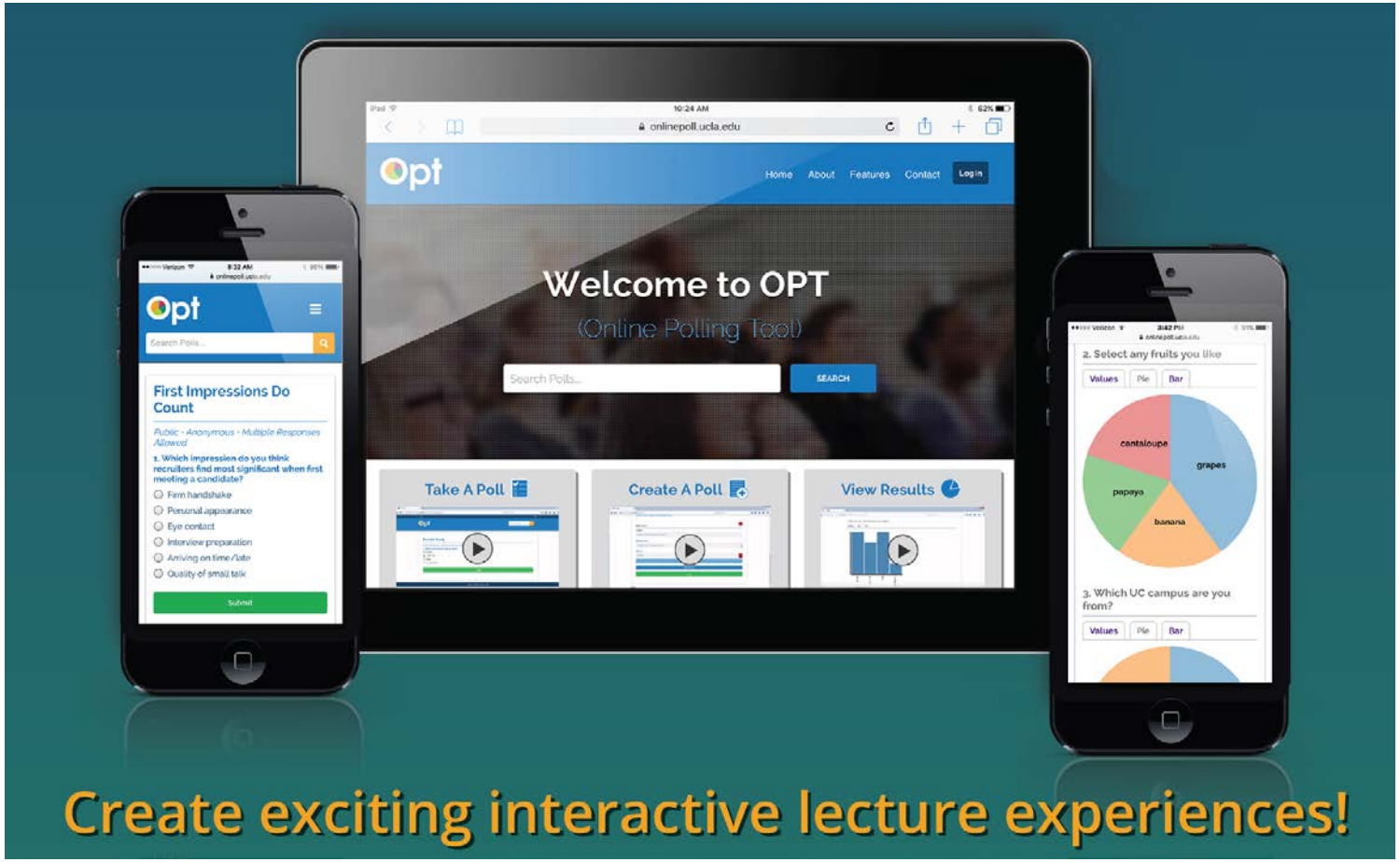
UCCSC 2016… In IT together

Free Interactive Polling for your Students



Given By: Rose Rocchio, OIT, UCLA

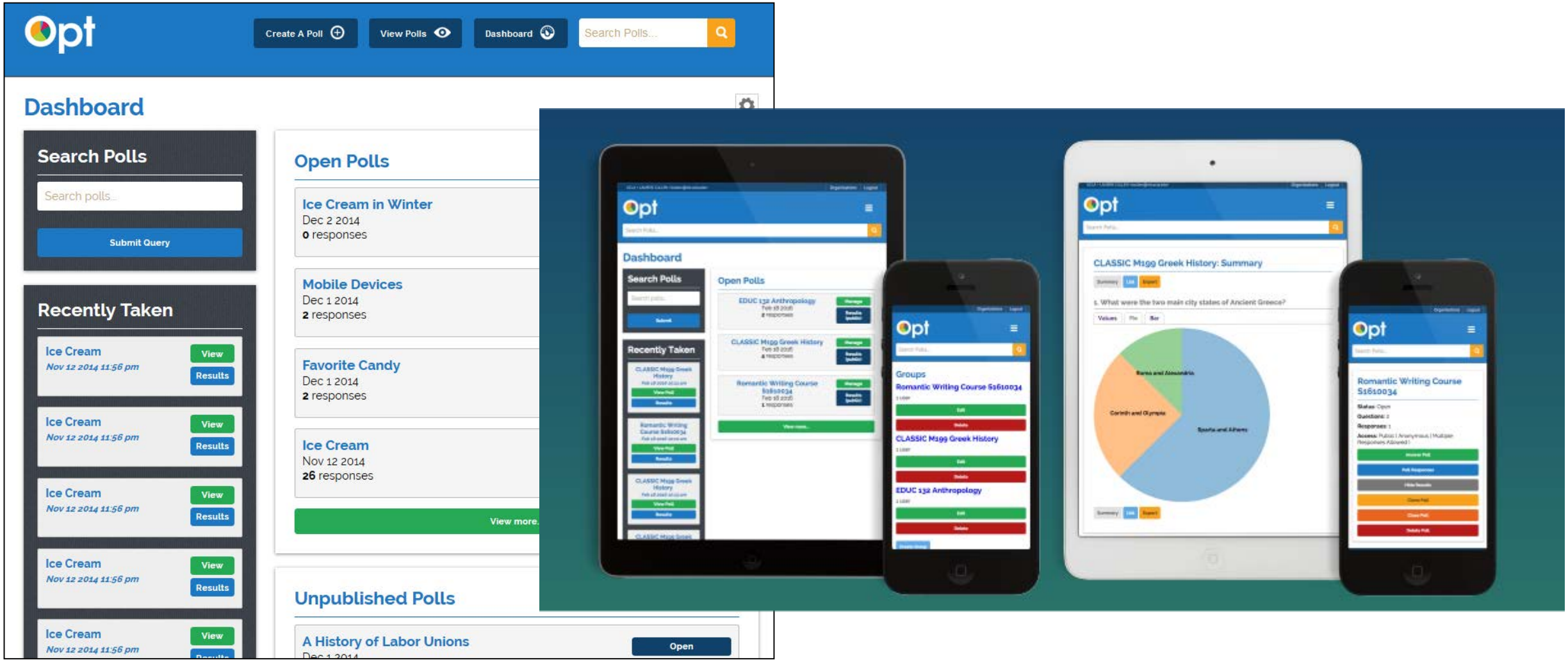
July 11th, 2016

What is OPT?

An Award winning, homegrown mobile friendly Online Polling Tool that provides a device agnostic FREE polling service, available to all UCLA faculty, staff and students.

- **The OPT system features:**
  - Integration via LTI with any LTI enabled LMS (1.0 so far)
  - Full Course roster integration for all UCLA faculty
  - Six different types of questions
  - Tablet and mobile device friendly
  - Easy to use poll creation interface
  - Poll cloning for easy to use poll replication
  - An alternative to expensive clickers and cloud vendor polling apps.
  - We are currently gauging interest in expansion to the UC.

OPT with Responsive Design



What we will go over Today

- Examples of some REAL faculty processes for how they use OPT
- Poll Creation Mechanics
  - ***Take Live Poll #1***
- Poll Creation Mechanics
- Quarterly Statistics
- OPT Features Coming Soon
  - ***Take Live Poll #2***
- Polling Tool Landscape
- OPT Market Study Results – Entangled Ventures

Lets take a sample poll

- Go to @ https://onlinepoll.ucla.edu
- No Need to login
- Search for UCCSC 2016 #1
- Password is ‘Campus’

#1 = Campus

Search: UCCSC #1

UCCSC 2016 #1

Public • Anonymous • Multiple Responses Allowed

1. What Campus/location are you from?

- UC Berkeley
- UC Santa Barbara
- UC Santa Cruz
- UCLA
- UC San Diego
- UCOP
- UC A&R
- UC Riverside
- UC Irvine
- UC Davis
- UCOP
- UC Merced
- Other

Submit

Poll Creation Mechanics Talk Excerpt by Professor Veronica Santos

Enhancing student engagement and lecture-based learning with the UCLA Online Polling Tool

Veronica J. Santos

Assoc. Prof. of Mechanical and Aerospace Engineering

BiomechatronicsLab.ucla.edu

April 29, 2016

My Process for Using OPT

1. **Prepare** a question slide in Powerpoint
2. **Create** the question at onlinepoll.ucla.edu
   - Code the question title
   - Protect the question with a password
   - Require student login to OPT
3. **Release** the question and password during lecture
4. **Go over results live** with students and address misconceptions on the spot
5. **Score** the questions offline

Poll Example #1

Clicker question

#22 = boba

Consider stopping an egg moving at velocity v_1 with either a loosely held bedsheet or a brick wall. For which case would there be a larger change in linear momentum?

A) Bedsheet **B)** Brick wall **C)** Neither

Poll Example #2

Clicker question

#47 = trippy

A man is walking with speed v_1 = 1.2 m/s to the right when he trips over a small floor discontinuity. **Estimate his angular velocity ω just after the impact.** His mass is 76 kg with center-of-mass height *h* = 0.87 m, and his mass moment of inertia about the ankle joint *O* is 66 kg-m^2, where all are properties of the portion of his body above *O*.

a) 1.20 rad/s CW

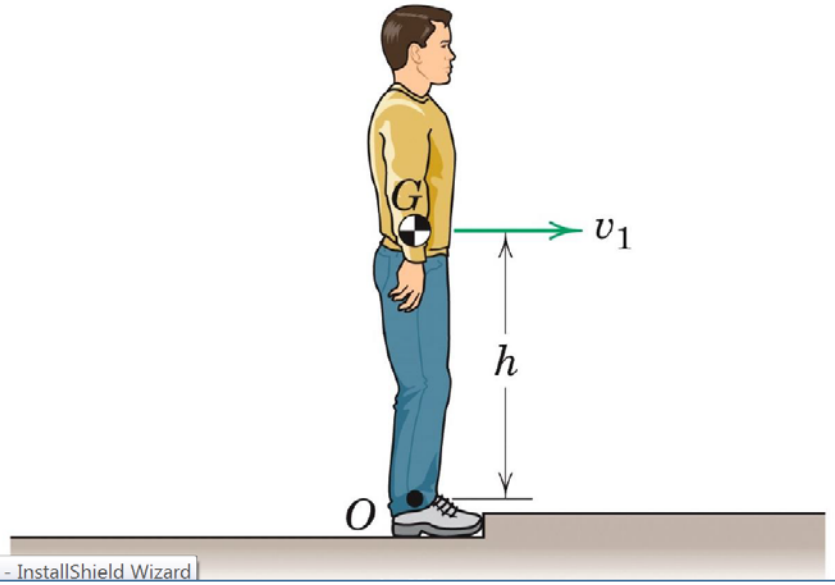
b) 1.38 rad/s CW

c) 5.78 rad/s CW

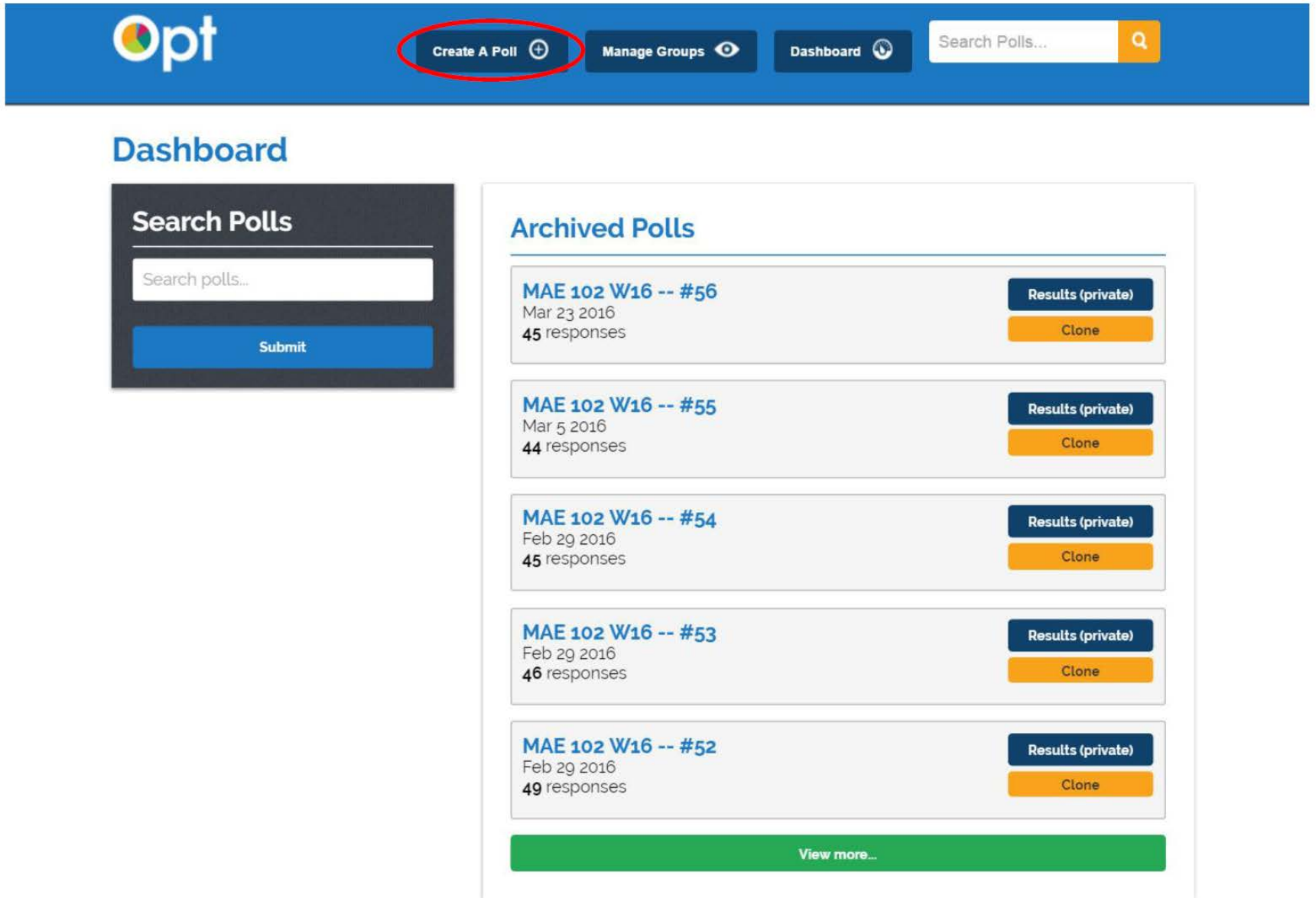
d) 22.6 rad/s CW

e) 79.3 rad/s CW

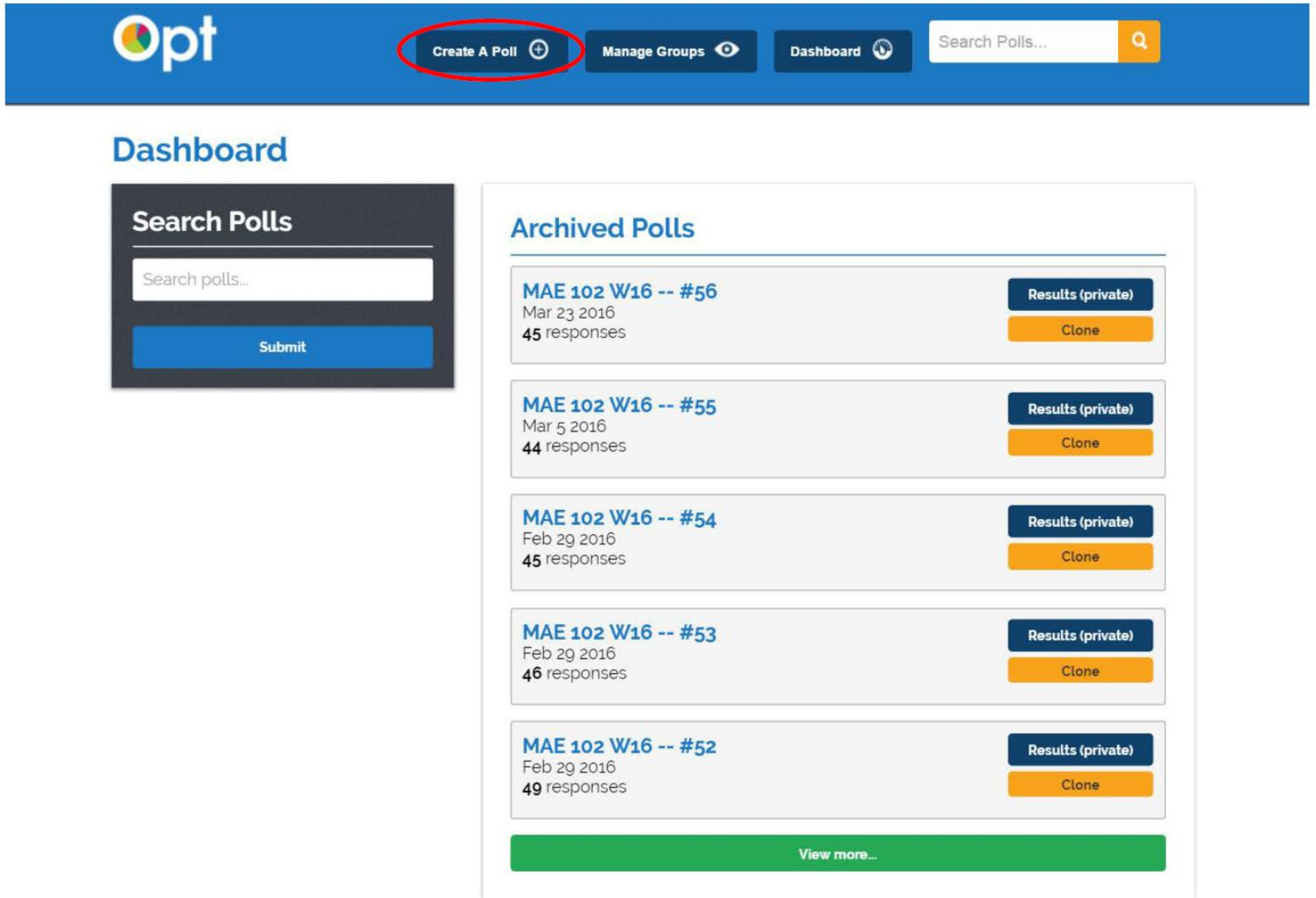
For fun



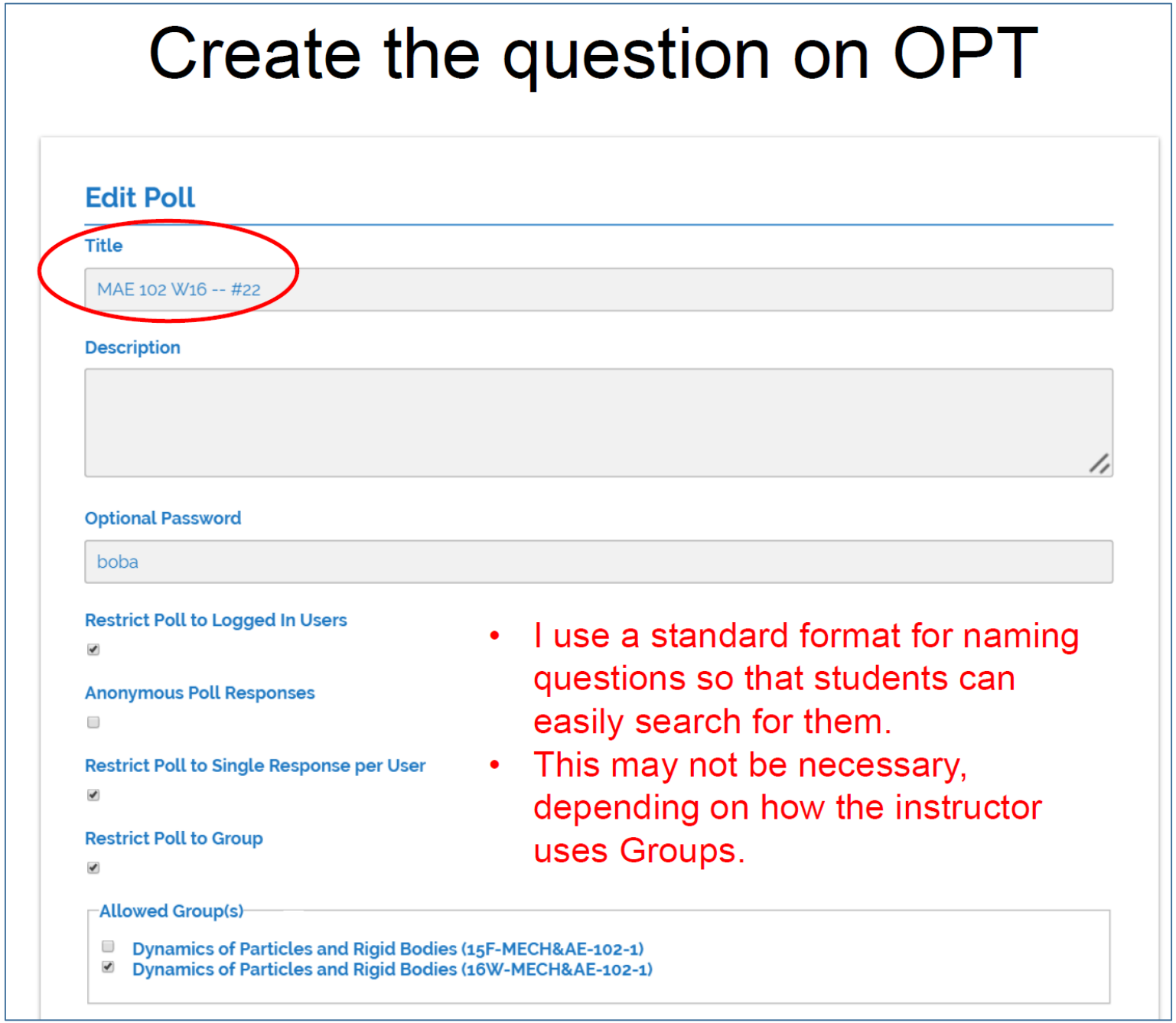
Create the question on OPT



Create the question on OPT



Create the question on OPT



- I use a standard format for naming questions so that students can easily search for them.
- This may not be necessary, depending on how the instructor uses Groups.

Create the question on OPT

Edit Poll

Title

MAE 102 W16 -- #22

Description

I use passwords to control the timing of the release of my questions.

Optional Password

boba

Create the question on OPT

Edit Poll

Title

MAE 102 W16 -- #22

Description

Optional Password

boba

Restrict Poll to Logged In Users

☑

Anonymous Poll Responses

☐

Restrict Poll to Single Response per User

☑

Restrict Poll to Group

☑

I require that students log in and cannot submit anonymous responses for points-based polls.

Edit Poll

Title

MAE 102 W16 -- #22

Description

Optional Password

boba

Restrict Poll to Logged In Users

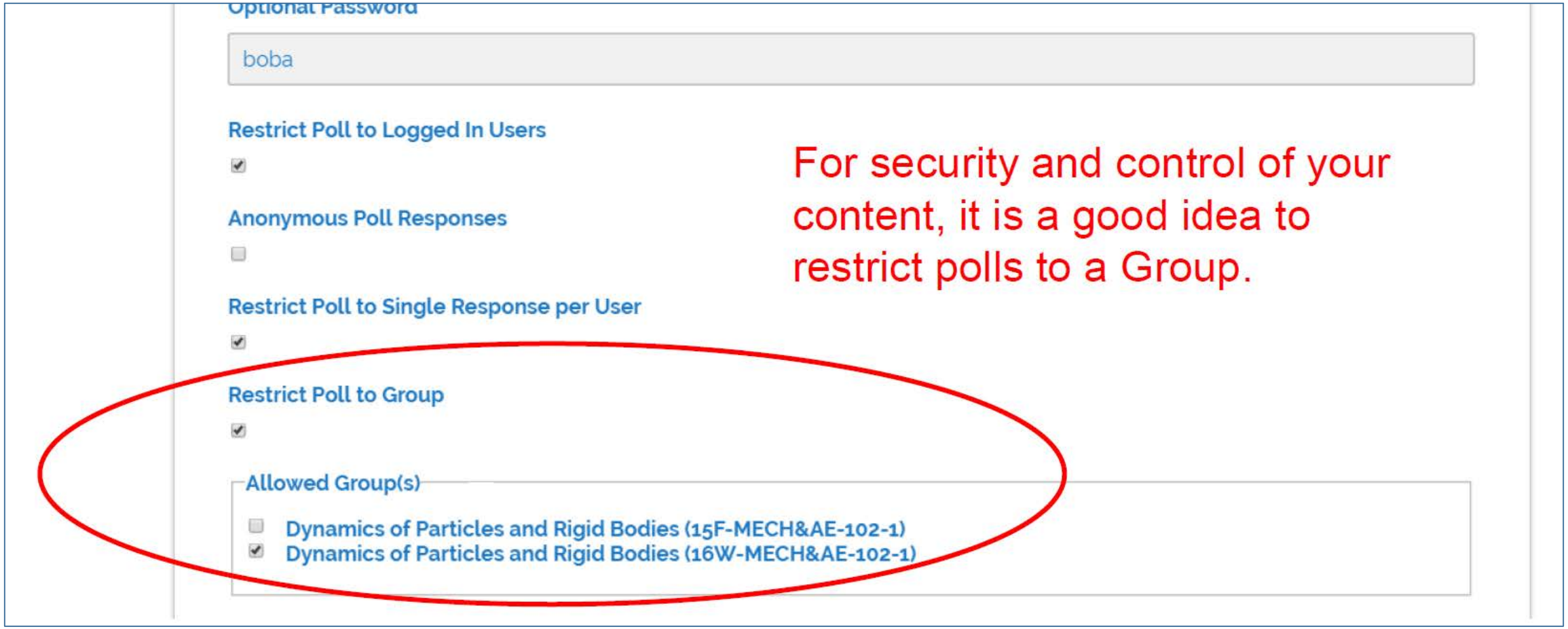
Anonymous Poll Responses

Restrict Poll to Single Response per User

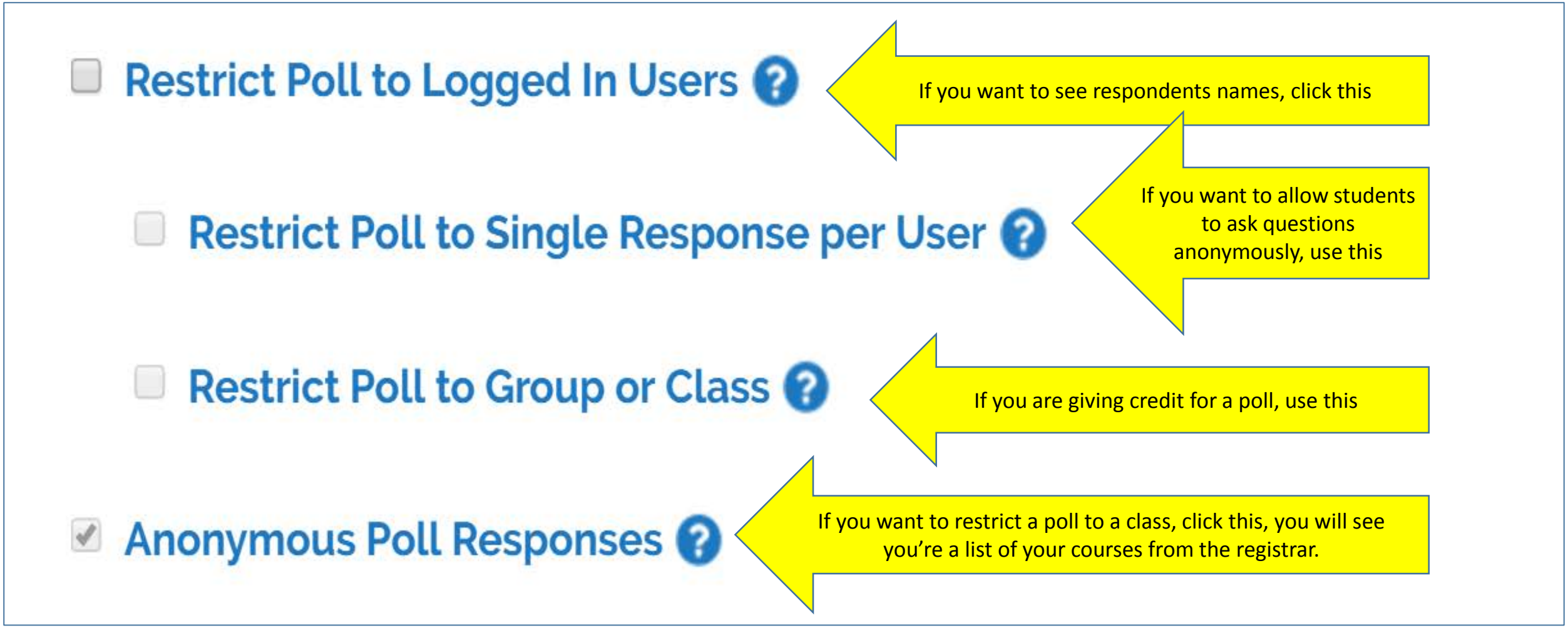
Restrict Poll to Group

I only allow students to answer a question once.

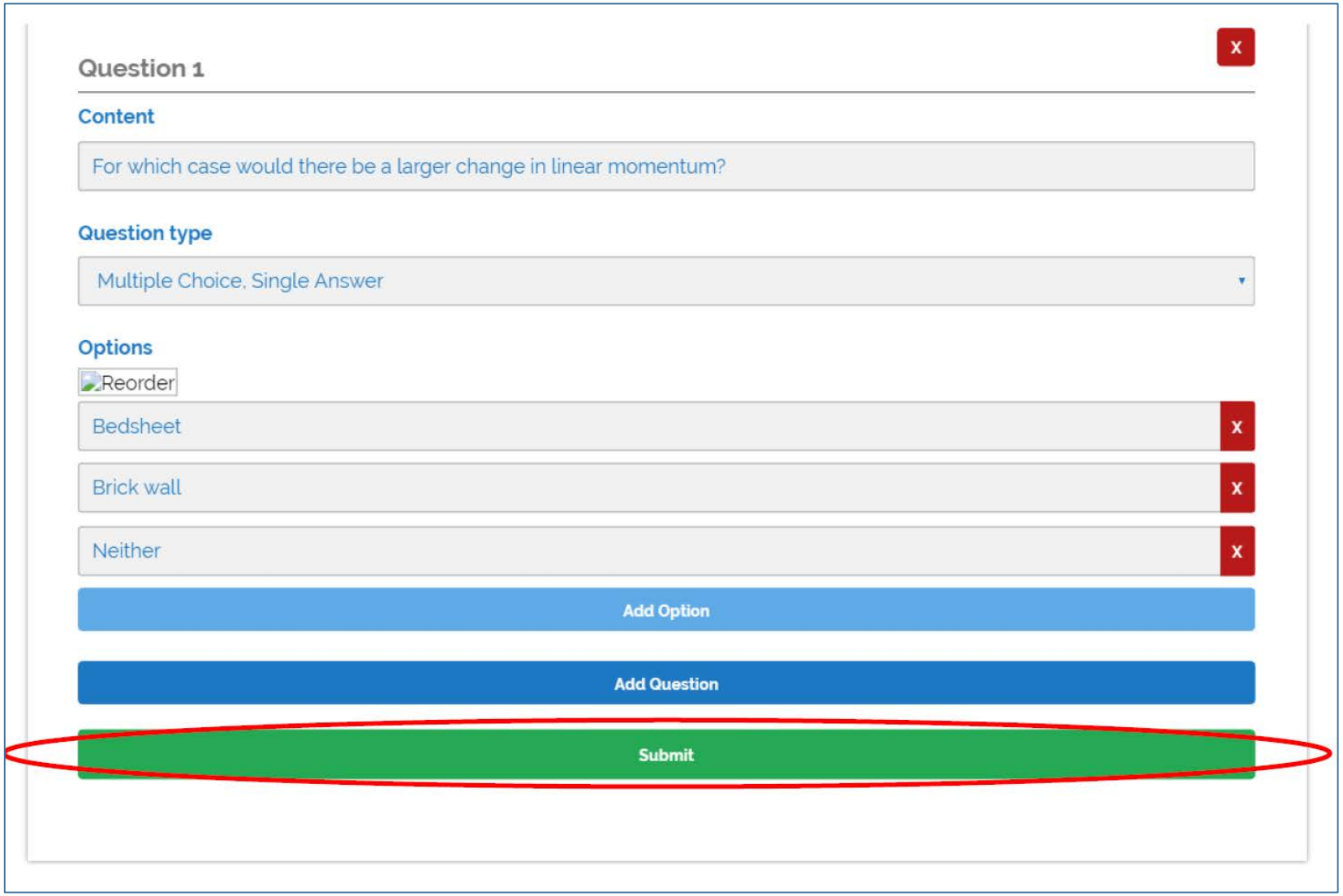
Security and & Control use Groups



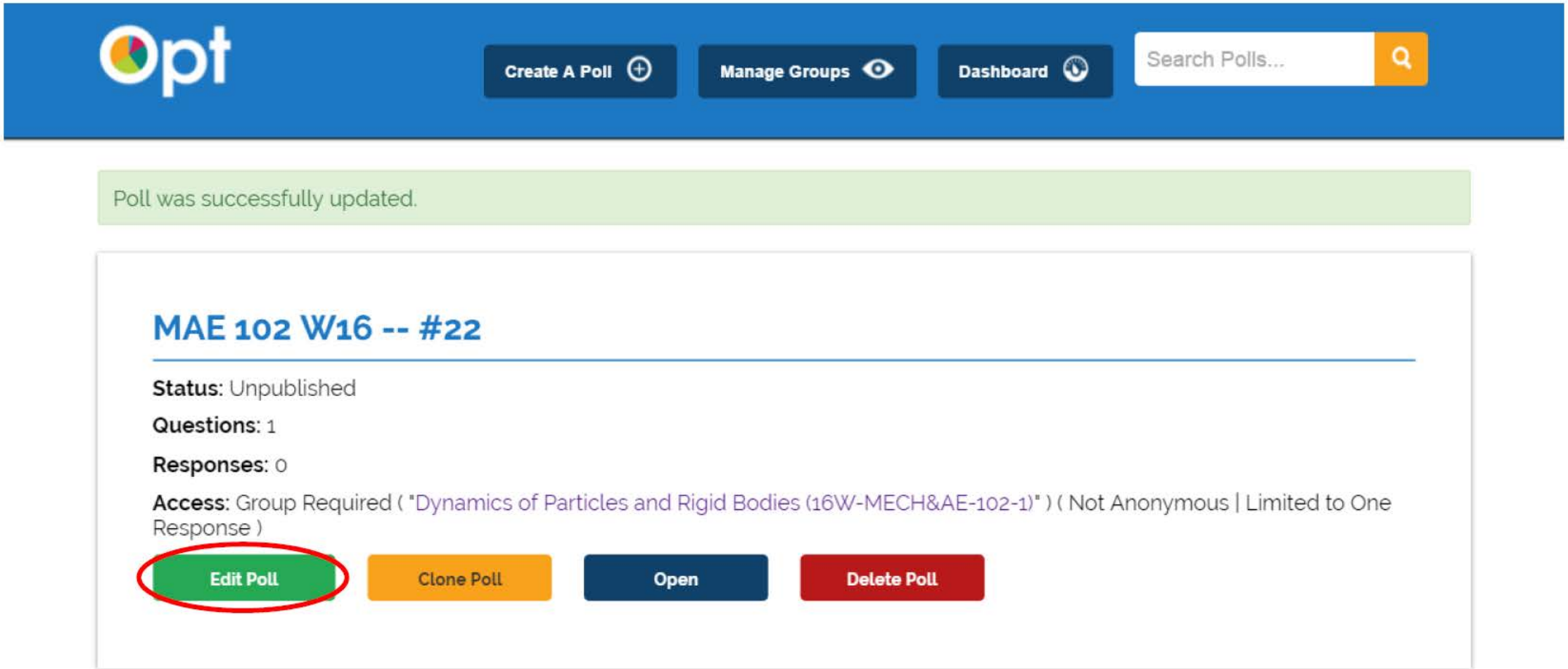
OPT Poll Creation Mechanics



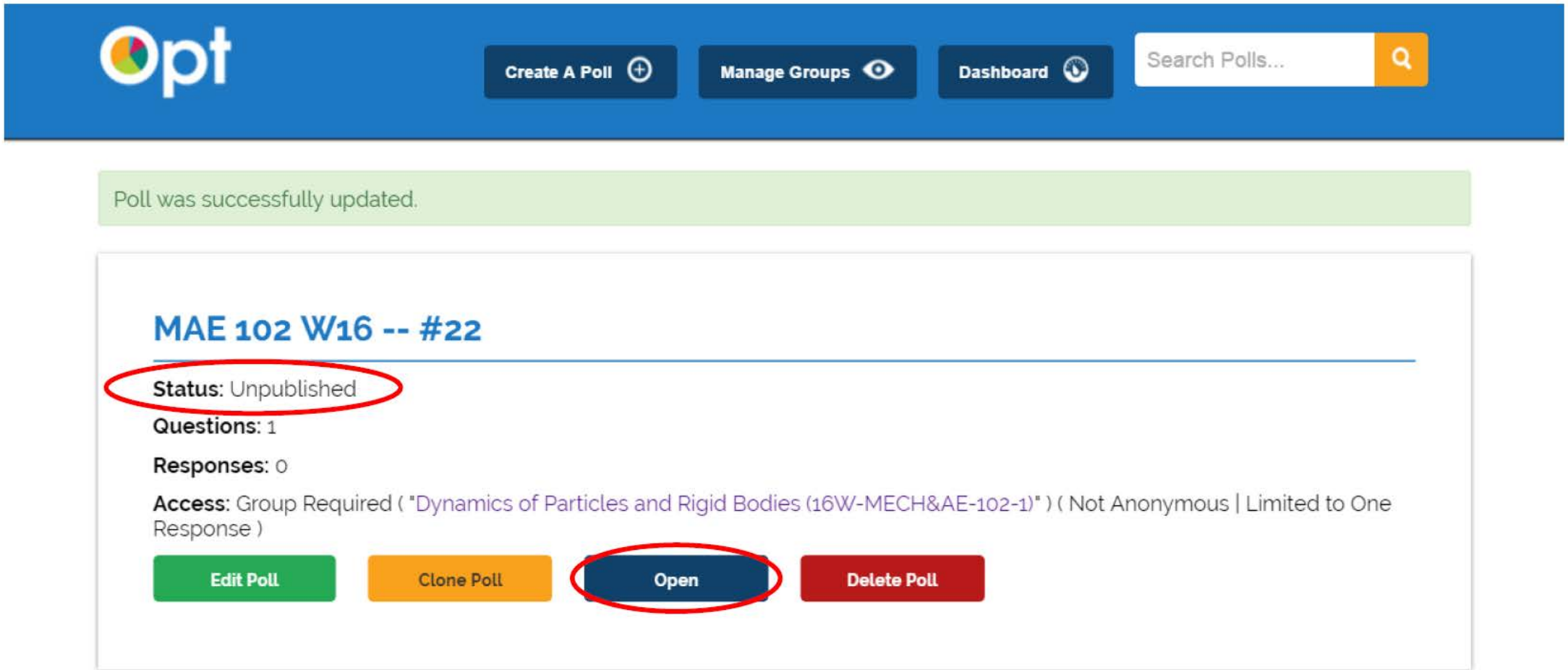
Submit the Poll to Save it



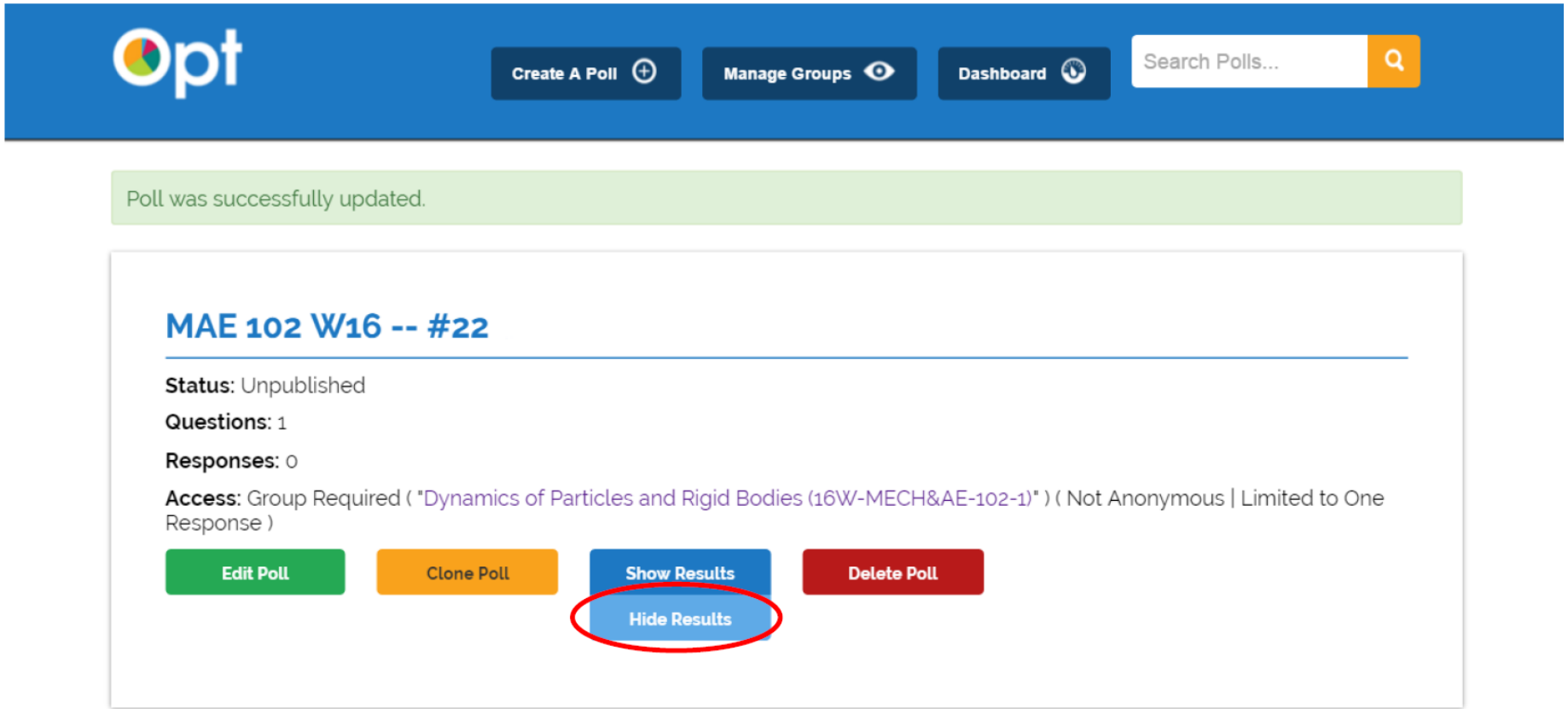
Edit the poll, as needed



Open the poll

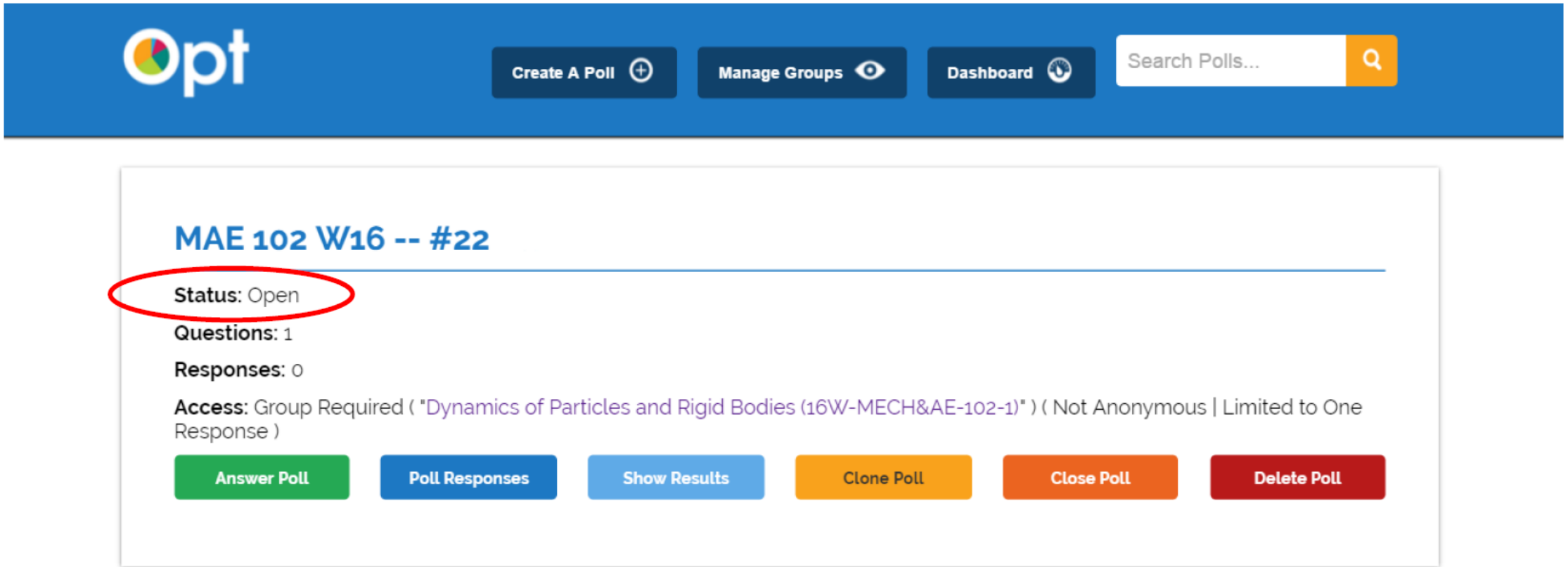


Open the poll

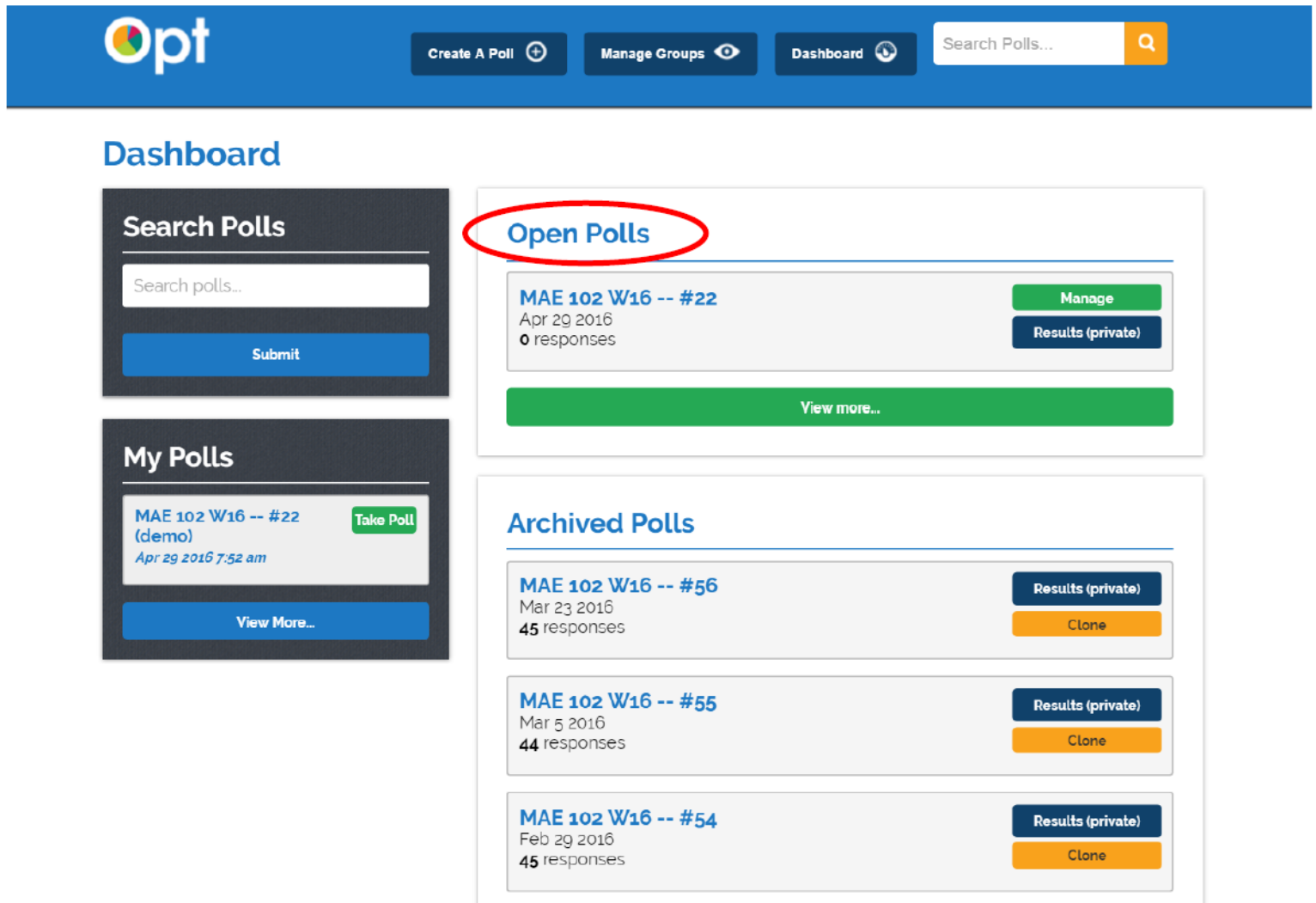


- Decide whether you want students to see aggregate responses while the poll is still open.
- I prefer to keep responses private until the “live reveal.”

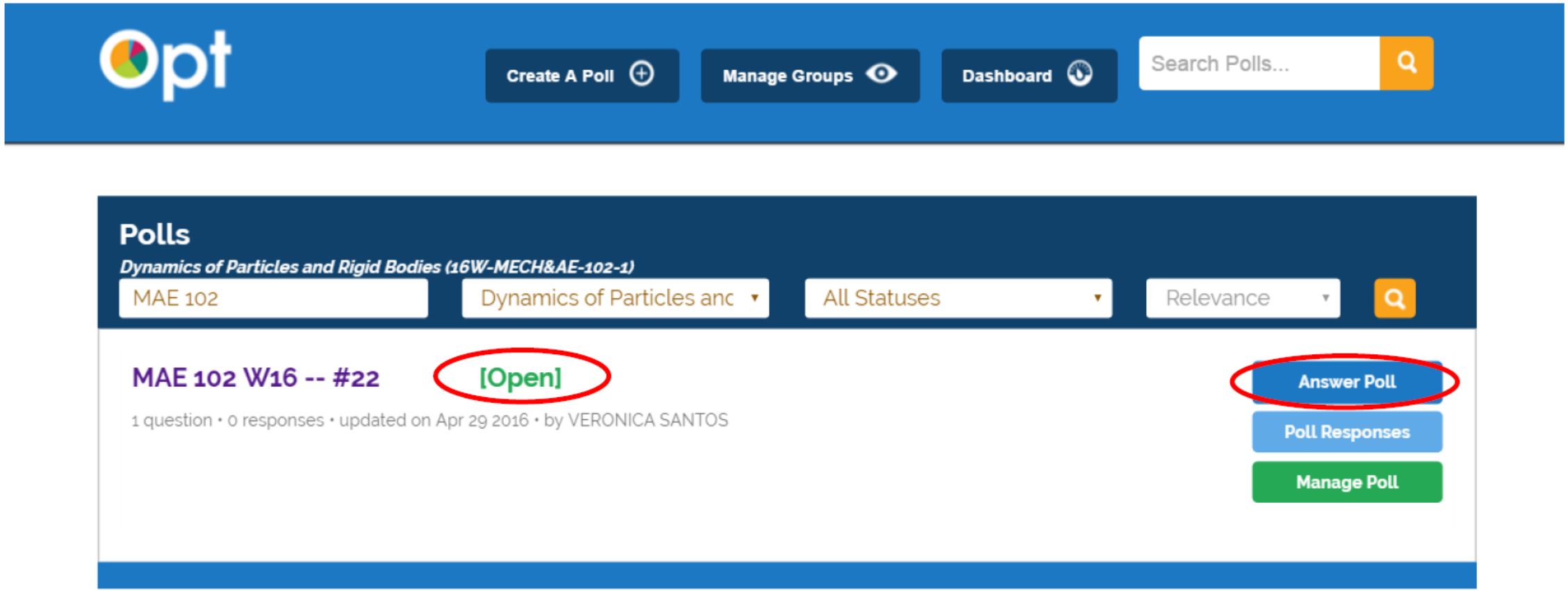
The poll is now “open” and available to students



The poll is now “open” and available to students



The poll is now “open” and available to students



REAL UCLA Instructions for Students

- You must be logged in at http://onlinepoll.ucla.edu/
- Wifi Instructions:
  - In order to successfully log in, you must use the 'UCLA_WiFi' network or your data plan.
  - The 'UCLA_Web' network does not have security privileges that enable you to log in with your BruinID.
- Polling points for correct answers over the course of the quarter will be used as extra credit.
- Participation in polls is optional.
- I will not be accepting any responses via paper unless there are extraordinary circumstances (e.g. cellphone battery dies, wi-ficonnectivity issues, etc.).
- Paper responses must be submitted **before** I close the poll and reveal the correct answer.
- All questions will have the format **MAE 102 W16 --#X**

Sample Instructions for Students

- You must be logged in at http://onlinepoll.ucla.edu/
- Give them Wifi Instructions (instruct which ones do NOT work)
- Explain how Points are awarded
  - Explain how points impact their grade (ie: extra credit only)
  - Decide if Participation in polls is optional
- State the Limitation on when you will accept a “paper” response (ie: before POLL is closed…and answer revealed)
  - Explain poll naming convention & how to find them:
  - Course Name # SeasonYY

Results of Real Course Poll

MAE 102 W16 -- #22: Summary

Summary | List | Export

1. For which case would there be a larger change in linear momentum?

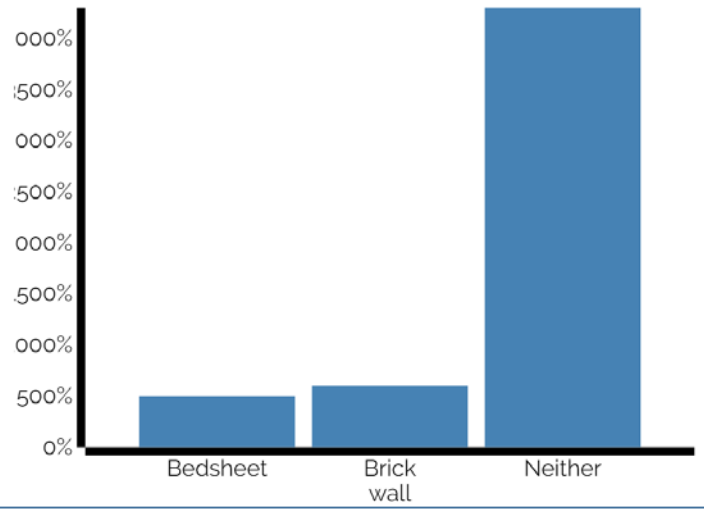
Values | Pie | Bar

Choice	Value
Bedsheet	5
Brick wall	6
Neither	43

Summary | List | Export

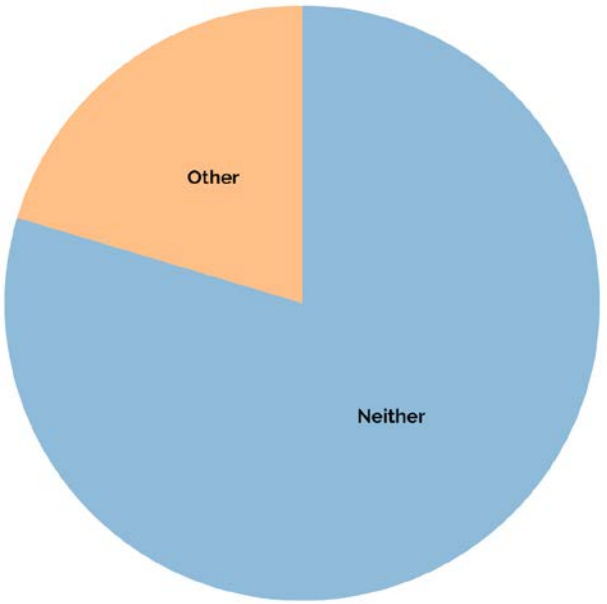
1. For which case would there be a larger change in linear momentum?

Values | Pie | Bar



1. For which case would there be a larger change in linear momentum?

Values | Pie | Bar



Summary | List | Export

“Completely Successful OPT Trial” Professor Gershon Weltman

Rose et al,

OPT worked like a charm.

I opened the poll during the 8:50 break, and directed the students to it after presenting the case study.

5 minutes for responses to 4 questions seemed more than enough; students are quick on mobile devices.

About 140 students responded, far more than the usual show of hands, and with far more enthusiasm.

The bar graphs provided valuable feedback on the distribution of responses, as well as a great point of departure for me to discuss the nature of the problems and ethical issues involved. I also had at least one student speak to the various points of view.

I've attached the slides I used in the polling trial for your information and any other use you can put them to.

All in all, a very productive experience, which I will endeavor to repeat and expand upon.

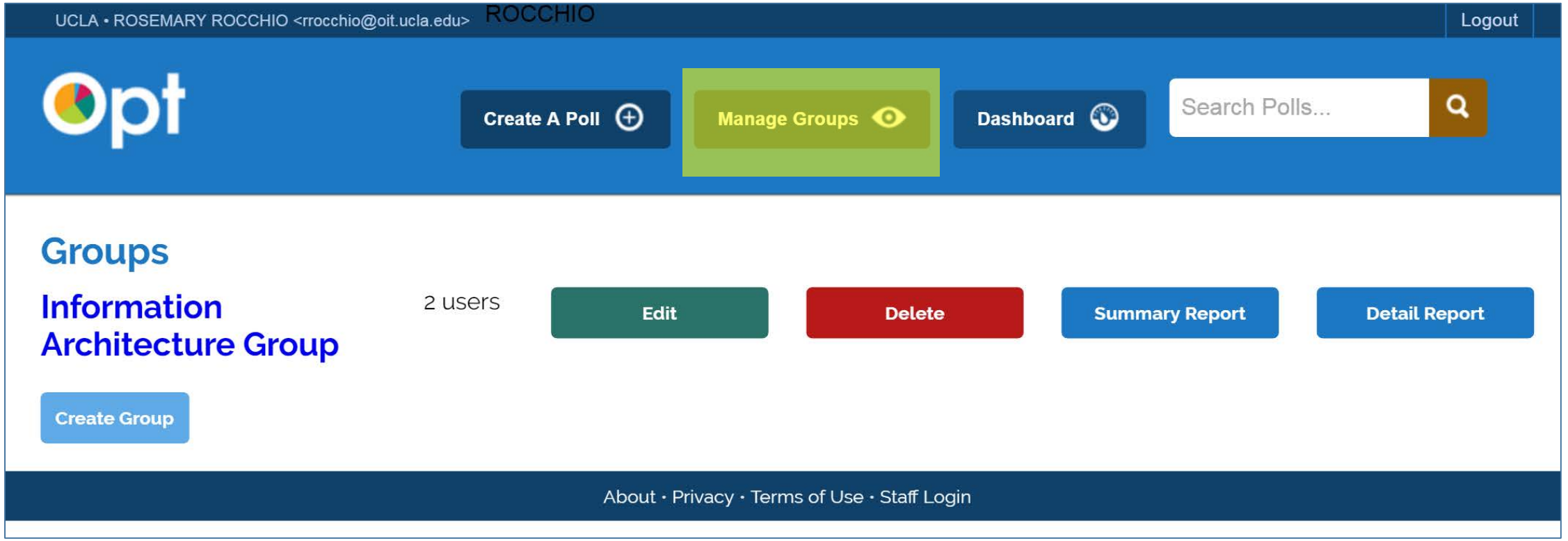
Thank you again for your invaluable guidance and help.

Gershon

Poll Discovery – getting to the polls

- Options to get students to find the polls:
  - Tell them the name
    - Restrict by creating password & give it in class
  - Give them the link or put it in CCLE
  - Use a QR Code
  - Create them for your Group/Class

*New Reports for Groups/Classes



Lets take a poll about features

- Go to @ https://onlinepoll.ucla.edu
- No Need to login
- Search for UCCSC 2016 #2
- Password is ‘Features’

#2 = Features

Search: UCCSC #2

UCCSC 2016 #2

Public • Anonymous • Multiple Responses Allowed

1. What Features are critical to a polling tool for OPT for your Teaching Needs? Check all that apply:

- [ ] Ability to identify which answer is correct
- [ ] Export of grades to LMS
- [ ] Ability to "rank" order choices in a multiple choice question
- [ ] The option to "time the close and release" of poll results
- [ ] Live updating visualization of results
- [ ] A Word Map visualization for short text answers
- [ ] Integration with Powerpoint
- [ ] Horizontal Bar chart for visualization
- [ ] Image click response with hotspots poll
- [ ] Ability to use LaTeX in labels
- [ ] Native App Clients

Submit

Features Under Development

- Live Updating of Results as an option
- Word Clouds for the text responses
- Ability to mark the correct answer and auto-score results
- LTI Outcomes

Features Under Consideration

- Implementation LTI 2.0
- Implementation of the Caliper metric profiles that apply

Ideas for Teaching with Polls

- Use your Groups/Classes
- Use an anonymous poll during your class to get questions students are too shy to ask
- Use it for feedback on each session

Benefits to a Cloud based Polling Tool

- No 3rdparty hardware costs.
- No 3rdparty software costs.
- No physical devices to track.
- No physical devices to maintain.
- Can leverage existing WiFi coverage throughout the campus.
- Can work with a local and responsive UC Team who are striving to develop a useful tool for instruction.

Benefits to students and instructors

- Helps to break up the monotony of 2 hour lectures
- Interactive lectures
- Instructors can detect, discuss, and correct misconceptions on the spot.

Particular benefits to students:

- They don’t have to pay for new devices that may only be used once.
- They don’t have to borrow, keep track of, or remember to pack devices.
- They don’t have to pay for 3rdparty software…typically done on a quarterly basis!

Student feedback

- Anticipation and excitement grew whenever I gave a series of questions, but did not immediately reveal responses.
- For students who did not care for clicker questions, I reminded them that clicker questions were optional.
- Anonymous student evaluations
  - "…clicker questions (good to wake us up and engage us, and also a needed break)."
  - "…clicker questions kept students focused and made sure they understood each concept."
  - "I really like the idea of Clicker questions because it encourages me to follow the lecture and not base my learning purely on review"
  - "Clicker questions help student to keep focus in class and provides a reason for interaction between the professor and students and between students."

Student feedback

- Anonymous student evaluations
  - “Clicker questions made it very easy to learn as it created opportunity to apply concepts to problems. Direct checking of understanding made it easy to never fall behind.”
  - “Clicker questions help reinforce the material and it's kind of fun.”
  - “With clicker questions, slides, and white board problems, I found this class to be very engaging. Throughout the quarter, I've found myself looking forward to having class and even felt like I was having fun solving clicker questions. Personally, I found the clicker questions and case studies great resources for building confidence to take on the homework.”

Opt

Home About Features Contact Login

DEMO

TRY DEMO

UCLA

UCLA LOGIN

Questions or Discussion

- Ideas on how and where OPT could be useful on your campus?

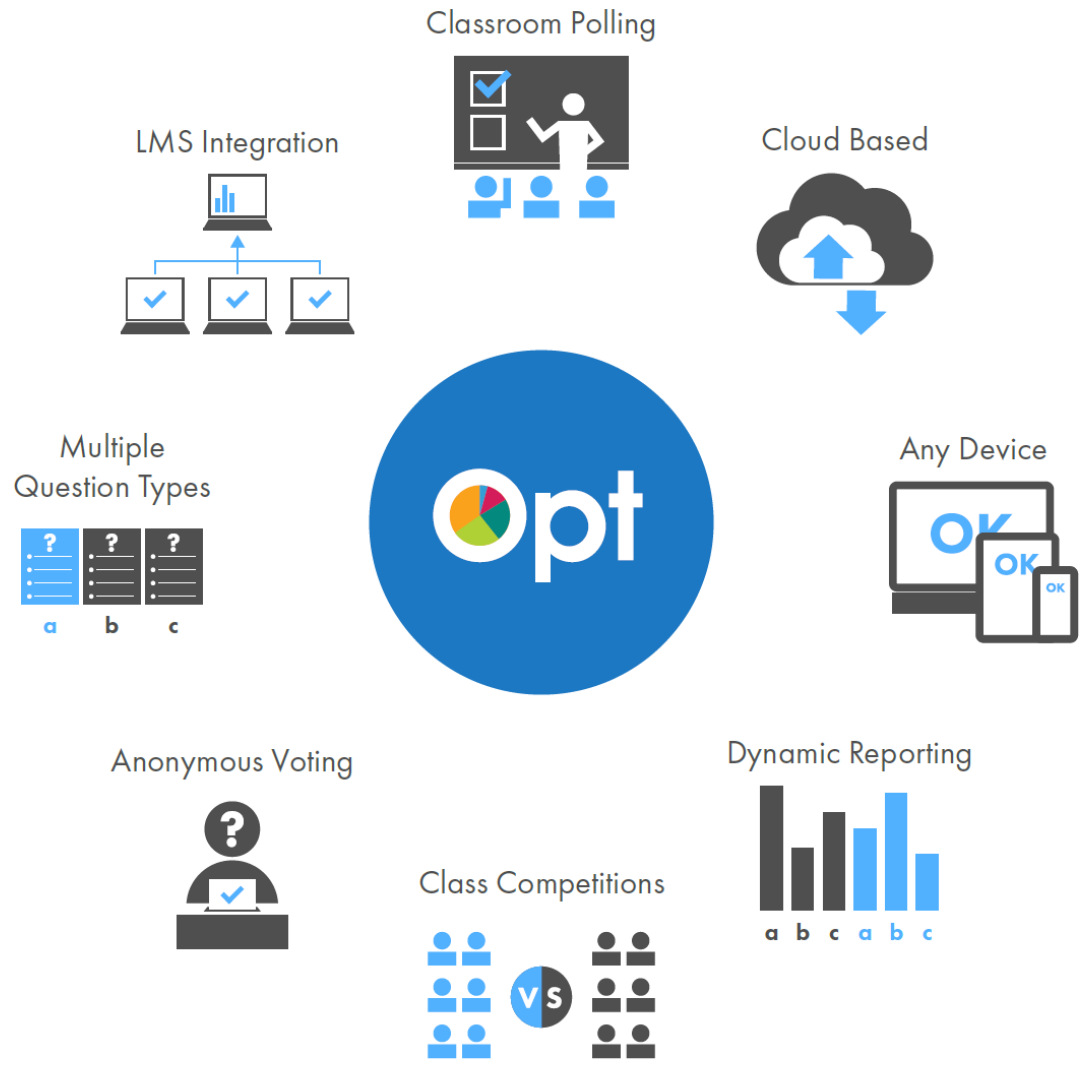
Commercialization Strategy

entangled.solutions

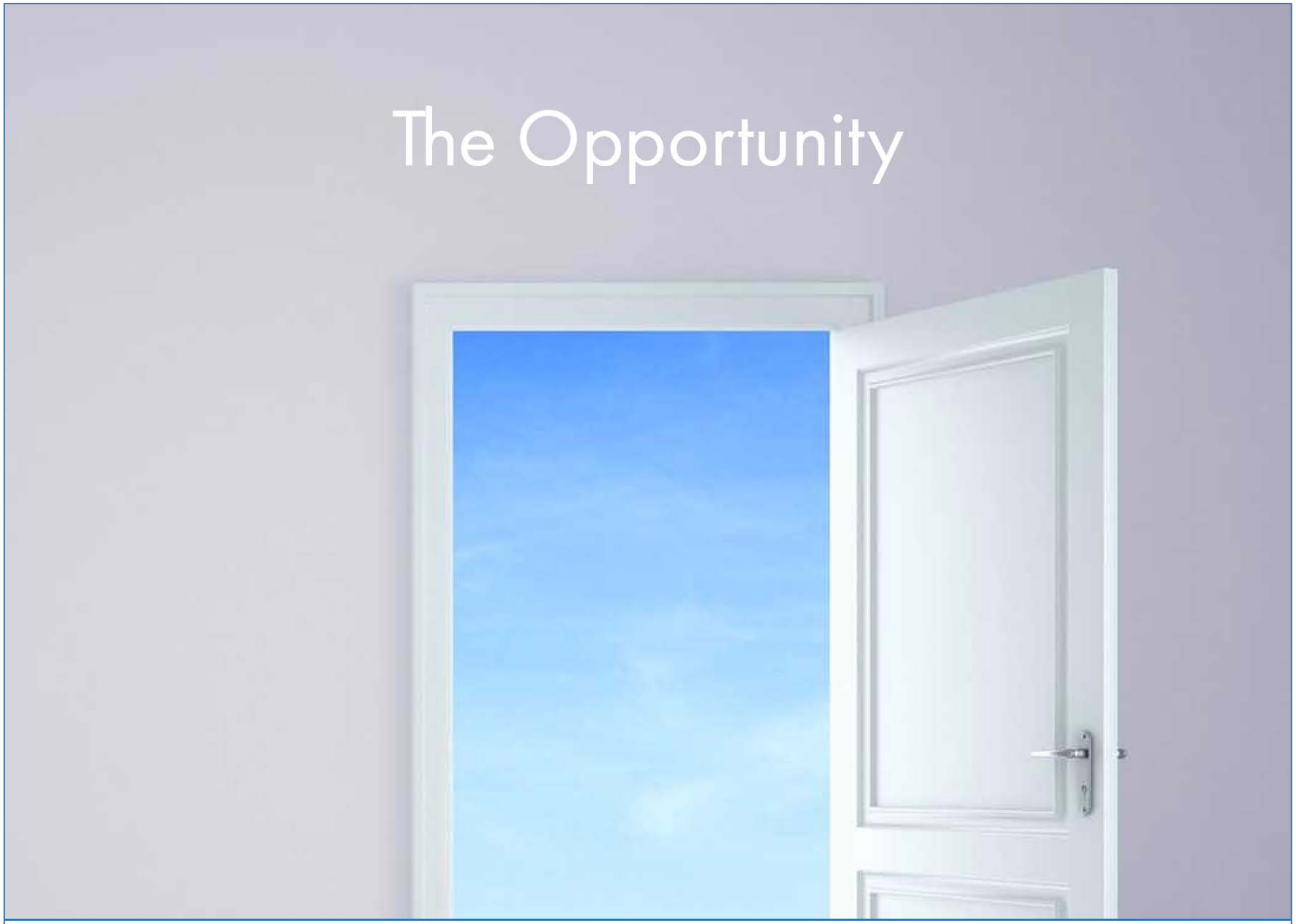
Lead Consultant: Paul Freedman

Project Manager: Mat Frenz

Overview


Classroom Polling
LMS Integration
Cloud Based
Opt
Multiple
Question Types
a b c
Any Device
OK
OK
OK
Anonymous Voting
Class Competitions
VS
Dynamic Reporting
a b c a b c

The Opportunity



Classroom Polling = Effective

A **study** of 2,600 students and 27 faculty members

Faculty

94% reported better student engagement
87% reported greater participation
74% reported improved student learning

Students

69% reported increased engagement
70% reported increased participation
67% reported increased attention levels

Market Composition

Higher Education

1,833,932 Instructors

4,726 Institutions

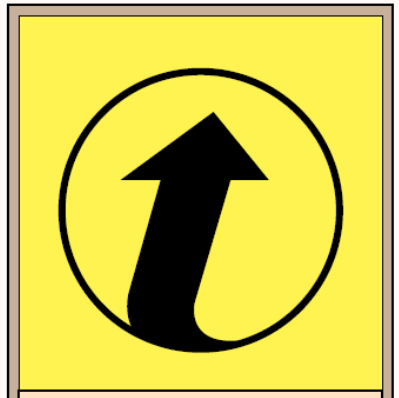
Grades 6-12

1,758,400 Teachers

132,183 Schools

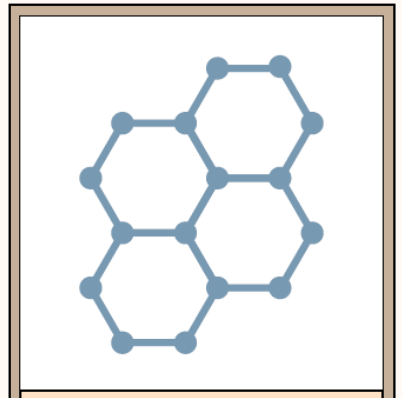
Competitors

The Players



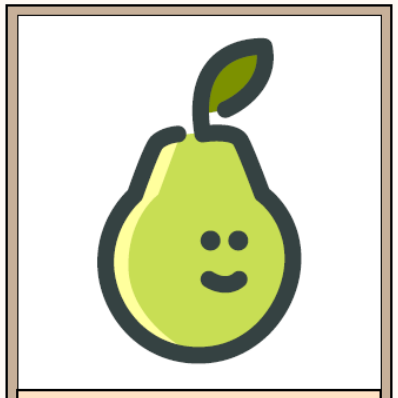
Company: Turning Technologies
Employees: 300
Users: 4M + Educators
Model: Subscription
Pricing: $8-15/yr/student

Company: Top Hat Monacle Inc
Employees: 140
Users: 500 + Institutions
Model: Subscription
Pricing: $36/year/student



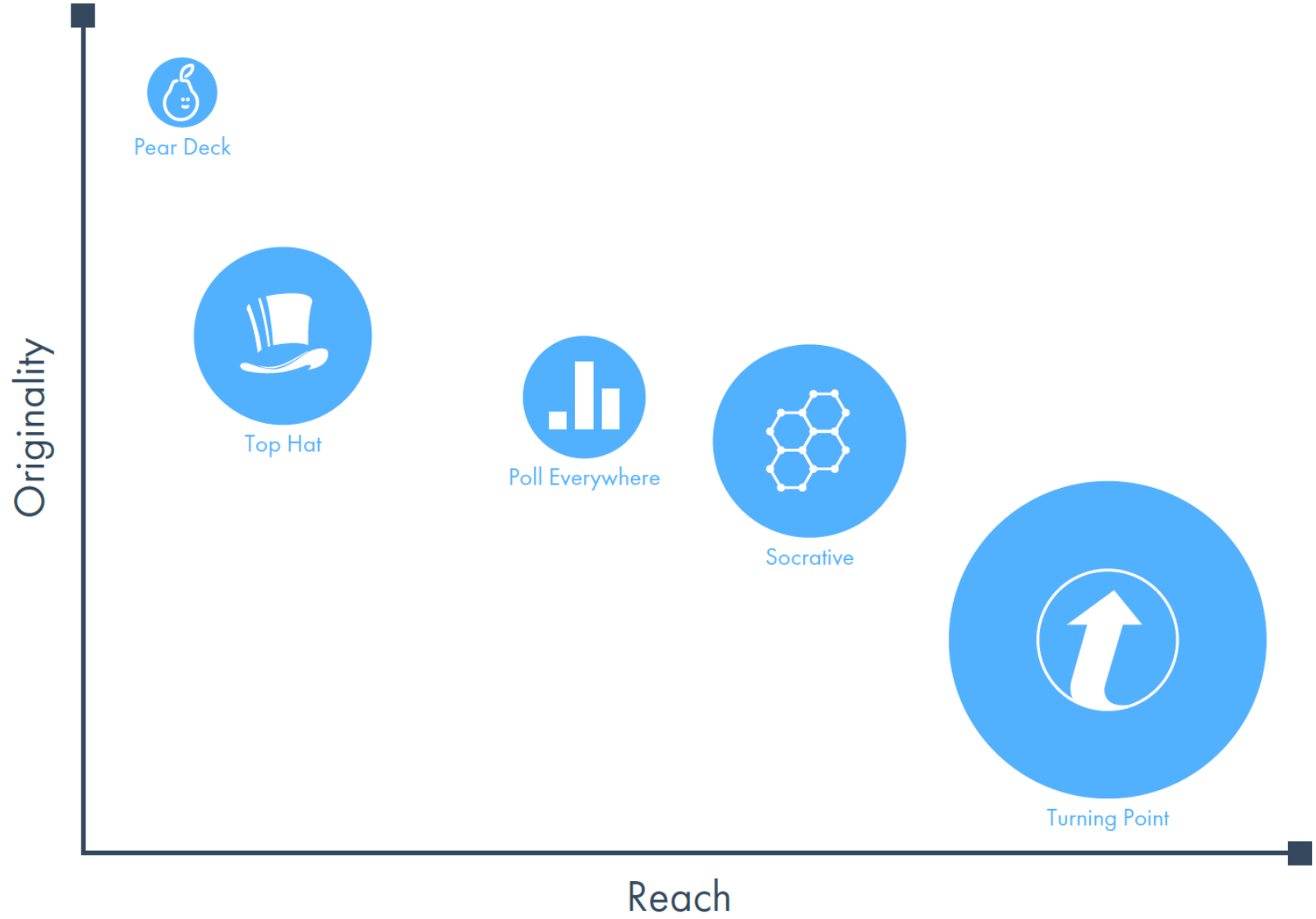
Company: MasteryConnect
Employees: 130
Users: 1.1M + Educators
Model: Free
Pricing: Free

Company: Poll Everywhere
Employees: 40
Users: 100k + Educators
Model: Freemium Subscription
Pricing: $14/yr/student



Company: Pear Deck
Employees: 9
Users: 4500 Schools
Model: Freemium Subscription
Pricing: $99/yr/student

A Varied Landscape



*Size of circles related to number of employees

Opt 3-Stage Go-to-Market-Strategy

Stage 1

UC Adoption
Investment: $10k-50k
Gate KPI: 2000 Professors

Stage 2

Monetization
Investment: $300k-500k
Gate KPI: 200 Institutions

Stage 3

Scale
Investment: $1MM+

Stage 1 - UC Adoption

$10k-50k Investment

This stage should be funded internally and used mainly for promotion and professional development across the UC campuses. It is clear that Opt satisfies a classroom need, but due to the crowded nature of the market it is critical that Opt gain significant traction before seeking a larger investment.

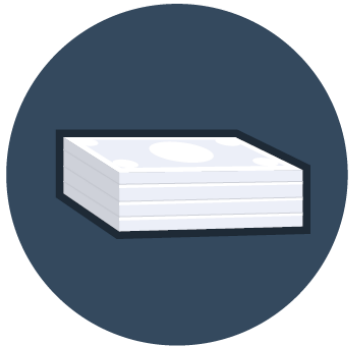
Entangled Solutions can assist with messaging and data analysis.

Goal: 2,000 Professors*

- **Sales & Marketing**
  Independent website
  Free to UC customers
  Faculty-sponsored webinars
  System-wide announcements
  Improved site messaging
- **Tech & Design**
  Additional server capacity
  Full LMS integration capabilities
  Improved site navigation and design
- **Structure**
  Remain internal

*Prerequisite to Stage 2

Stage 2 - Monetization



$300k-500k Investment

This stage can be funded internally or externally and is focused on differentiating Opt in two major ways. First, Opt must identify and build 2-3 core features that distinguish it from its competitors. Second, it must innovate a new type of business model in the online polling space that allows educators and students to use it for free, always, while generating significant revenue. Examples of a model include licensing access to a global poll library or providing deep analytics to administrators.

Goal: 200 Institutions*

- **Identify Founder**
- **Sales & Marketing**
  Implement freemium licensing
  Contract PR
  Contract SEO
- **Tech & Design**
  Global poll library
  Advanced data analytics for administrators
  Professor/Teacher profiles
  White labeling capabilities
- **Hires**
  Sales Rep
  Programmer (1 or 2)
  Designer
- **Structure**
  New entity

*Prerequisite to Stage 3

Stage 3 - Scale

$1M+ Investment

This funding should be sought externally and focused on growing the user base as rapidly as possible. The recommendations on this slide are only examples of how the product and team should develop. At this point, multiple market-driven factors beyond prediction will drive the product success.

- **Sales & Marketing**
  Develop inside sales force
  Expand reach globally
  Expand into K-12 market
- **Tech & Design**
  Implement deep courseware integration
  Adapt with market and technology shifts
  Grow poll library dramatically
  Continuously improve analytics