

# Building an Instructional Technology Toolkit

Integrating Teaching & Learning Tools to Empower All Learners

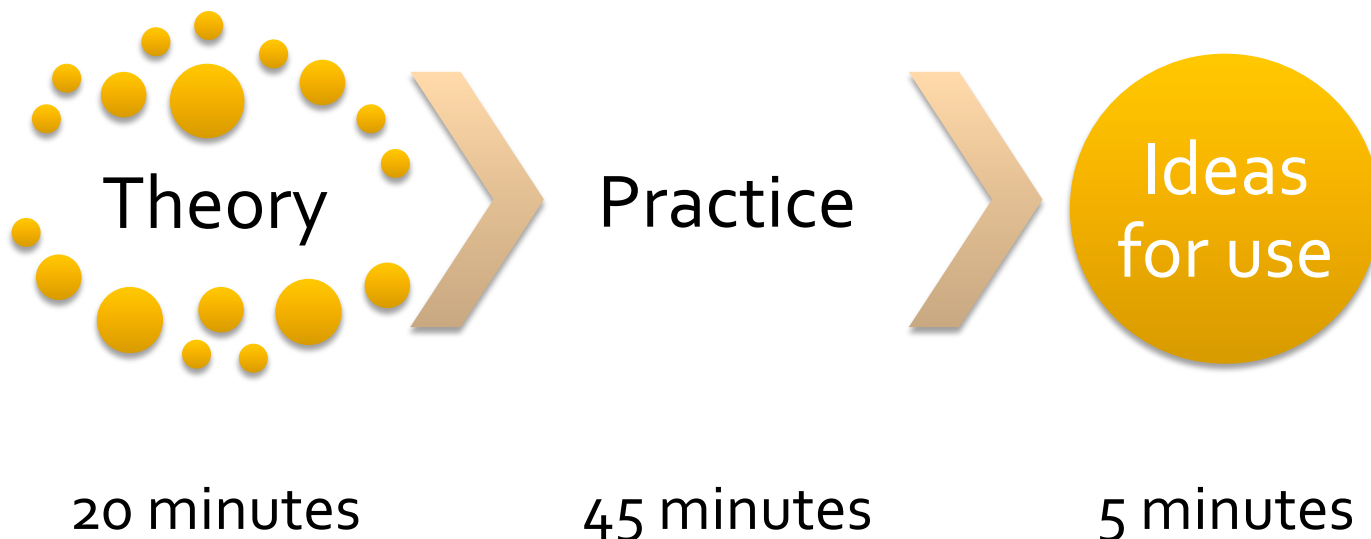
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# Workshop Goals

At the conclusion of this workshop, you'll be able to:

- Identify how instructional technology tools can be used in a variety of settings to engage different learning preferences and create active learning opportunities
- Synthesize principles for using instructional technology effectively in the context of your own teaching and learning environments to empower student learning
- Use today's hands-on experiences using instructional technology tools to select at least one new tool you can use to empower students in their own learning, and share how this tool will be used in your teaching



# The Cephalonian Method



Sims, 2008

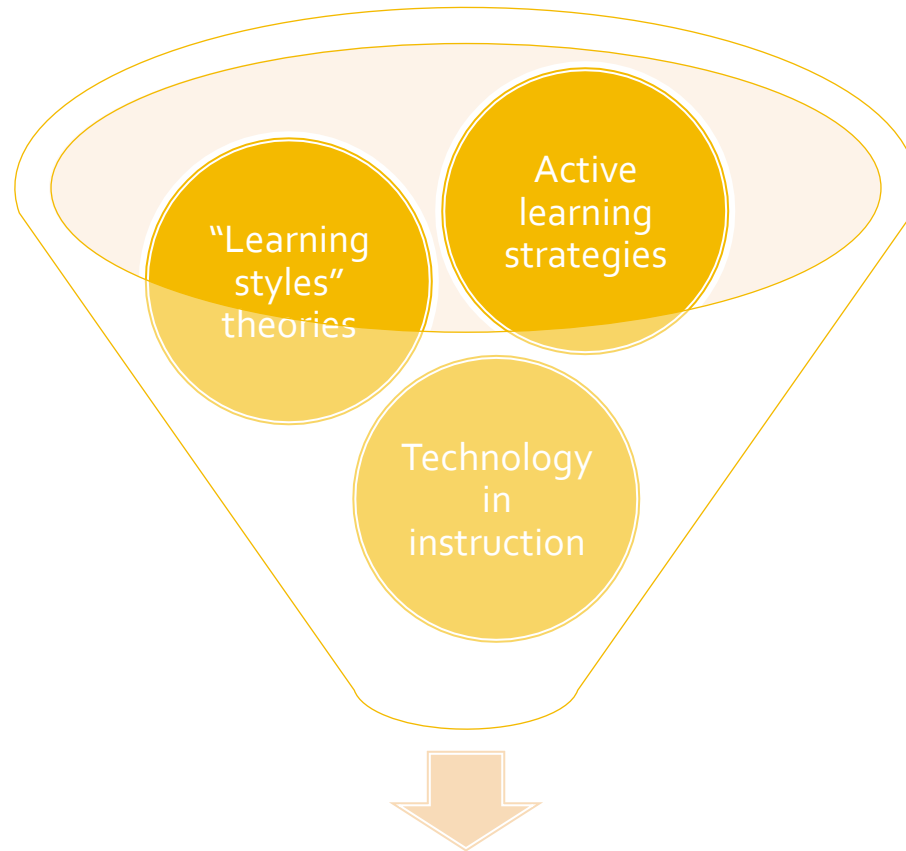
# The Cephalonian Method

1



Sims, 2008

# Instructional technology toolkit



Empowering Student Learning

# Active Learning

2



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# Active Learning

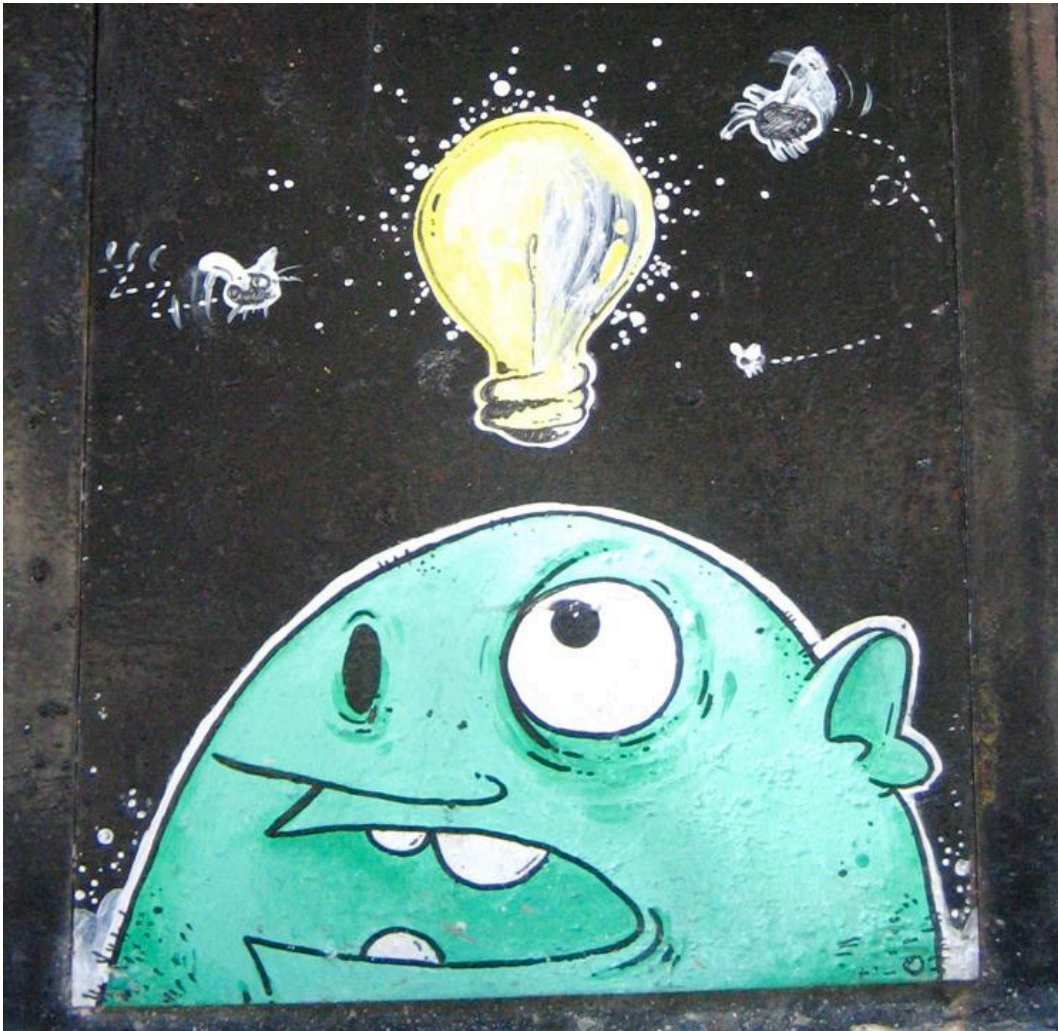
3



Brannan, M. (2007). Learn [digital image] Retrieved October 1, 2013 from Flickr: [http://farm2.staticflickr.com/1412/1197947341\\_89doff8676\\_b.jpg](http://farm2.staticflickr.com/1412/1197947341_89doff8676_b.jpg)

# Learning Styles

4



theoretical perspective

approaches and strategies  
for learning

making sense of the world

approaching tasks

problem-solving

communicating with  
others

# Learning Styles

5

Jung (1964)

Introversion?  
Extroversion?

Sensation?  
Intuition?

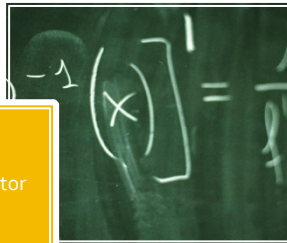
Thinking?  
Feeling?

Judging?  
Perceiving?

Converger



Assimilator



Visual



Kolb (1984)

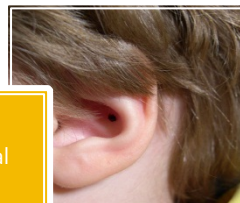
Diverger



Accommodator



Aural



Read/Write



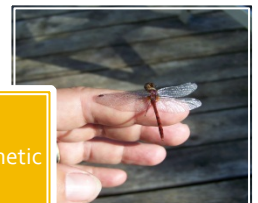
Gardner (1983)

- Musical
- Visual / spatial
- Verbal / linguistic
- Logical / mathematical
- Bodily / kinesthetic
- Interpersonal
- Intrapersonal
- Naturalistic
- Existential

Multiple  
intelligences

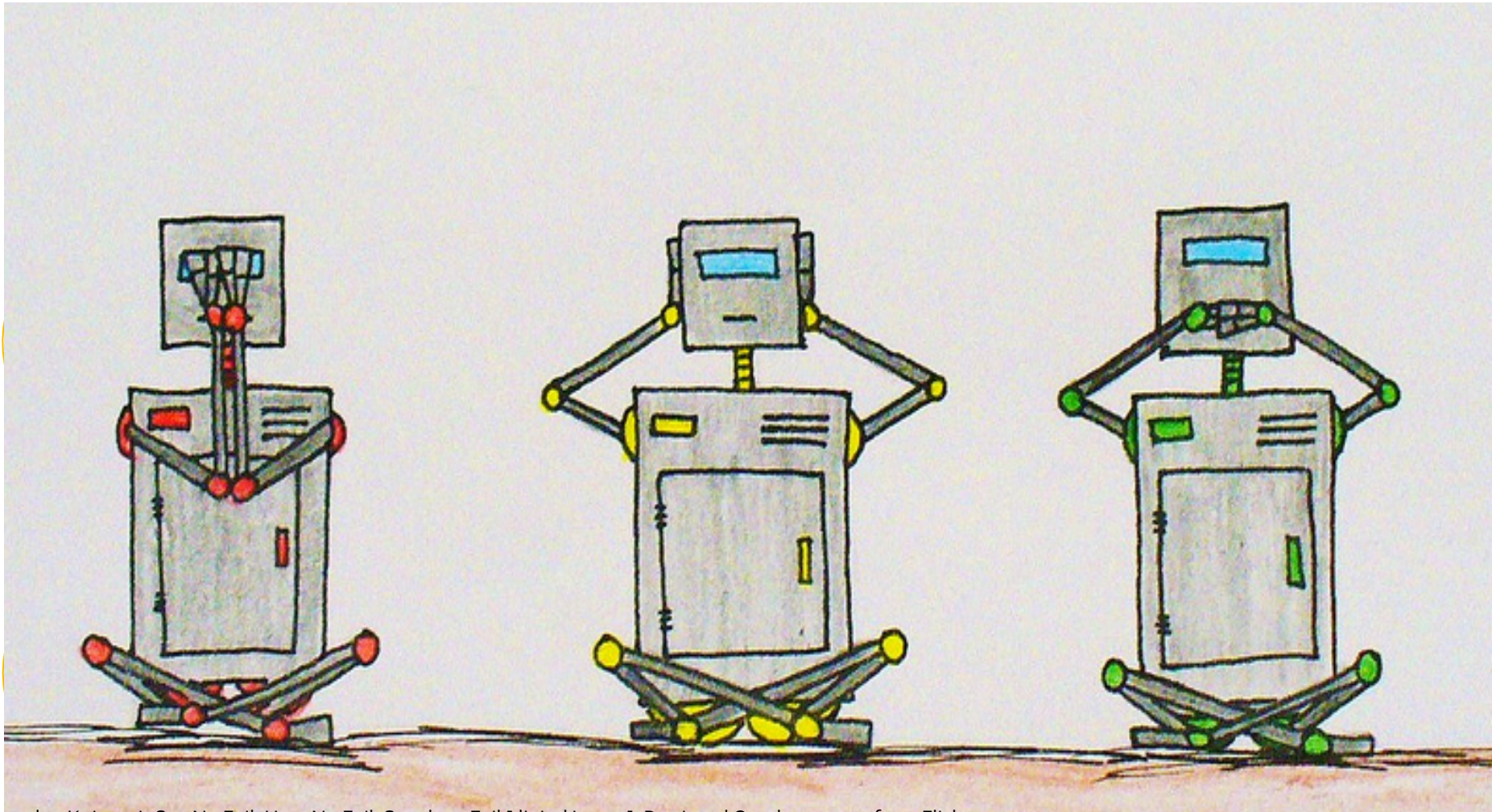
Fleming (1987)

Kinesthetic



# Learning Styles

6



Treseder, K. (2010). See No Evil, Hear No Evil, Speak no Evil [digital image]. Retrieved October 7, 2013 from Flickr:  
[http://farm5.staticflickr.com/4080/4939373913\\_3bb861201f\\_b.jpg](http://farm5.staticflickr.com/4080/4939373913_3bb861201f_b.jpg)

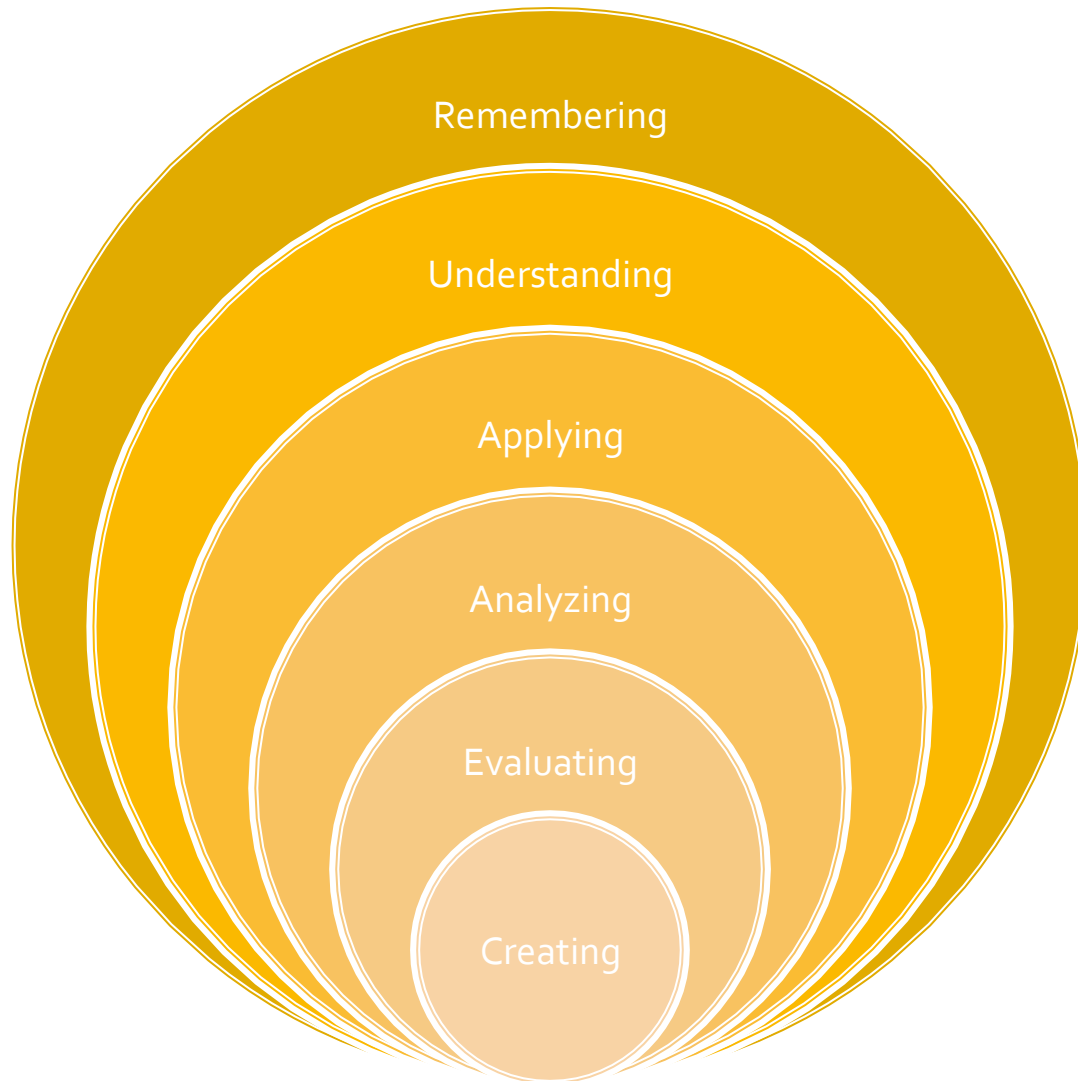
# Using Technology in Teaching



# Using Technology in Teaching



# Bloom's Revised Taxonomy



# Remembering

## zotero



Collect



Organize



Cite



Sync



Collaborate

Grab your research with a single click.

## diigo



## EVERNOTE®

Remember everything.

**Capture anything.**

Save your ideas, things you like, things you hear, and things you see.

**Access anywhere.**

Evernote works with nearly every computer, phone and mobile device out there.

**Find things fast.**

Search by keyword, tag or even printed and handwritten text inside images.



**Read more effectively with annotation tools**  
handy digital highlighters and sticky notes on PC / Mobile

**Build your personal library**  
with links, pages, notes, pictures, etc



**Organize information as little or as much as you want**  
once saved, easy to find, on any device, PC or mobile

**Say goodbye to broken links**  
webpages are archived



**Better collaboration for any group, large or small**  
family, class, team, entire company

**Provide feedback and catch attention**  
with highlights, sticky notes or screenshots

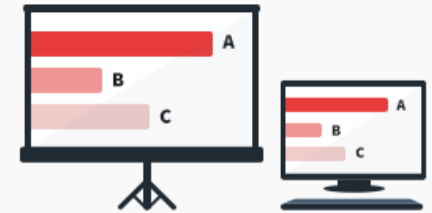


**Share information as much or as little as you want**  
both introverts and extroverts can be at ease

# Understanding



## Poll Everywhere



- 1 Ask your audience a question with the Poll Everywhere app
- 2 Audience answers in real time using mobile phones, Twitter, or web browsers
- 3 See your response live on the web or in a PowerPoint or Keynote presentation



### EXIT TICKETS

Check in on your students' understanding as they head out the door. Gather responses on their comfort with the material as well as answers to questions you create in real time or prepare before class.



**socrative**

# Applying

**Word of the day: fascinate**  
Make a sentence with this word and post it here. Remember to put your name on the post.

**Tim**  
Harry Potter books are very fascinating.

**Anton**  
I have always been fascinated by the Japanese culture.

**Roger**  
The Pyramids of Egypt are still very fascinating.

**Sasha**  
Discovery channel has some fascinating TV shows.

**Jennifer**  
The magician fascinated the audience.

**Alex**  
A lot of people fascinated come here countries.

**Tarun**  
Our fascination with technology is not good for our health.

**Carol**  
Martin Luther King Jr was a fascinated sneaker.

**Mr Sha**  
Carol, fascinated is a verb. You need to use the adjective form of the word.

**Corinne**  
Walt Disney world has

**Patrick**  
My 1 year old brother finds the vacuum cleaner very fascinating.

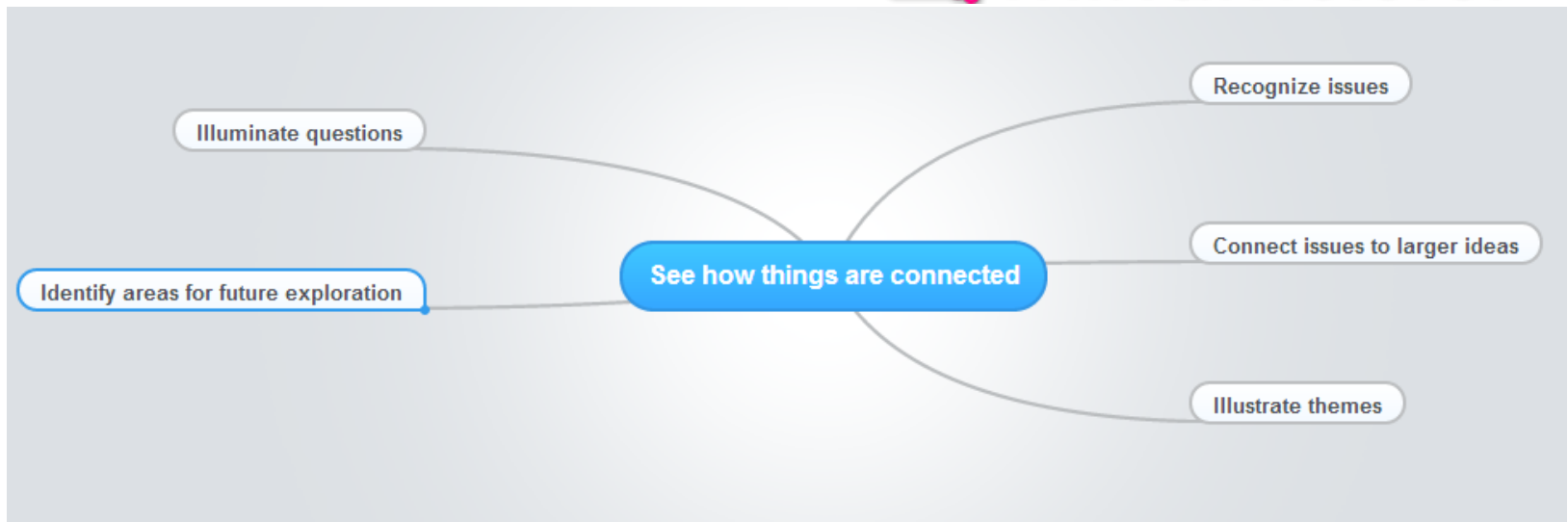
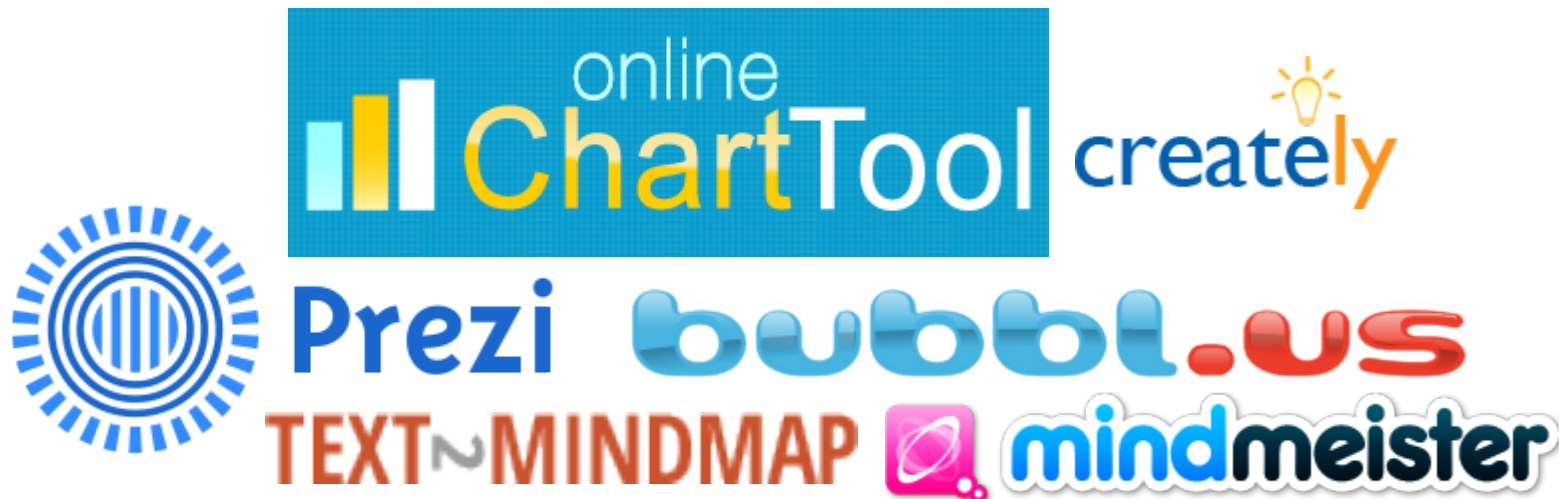
**SCREENCASTOMATIC**

**screenr** SM



**padlet**

# Analyzing



# Evaluating



# SurveyMonkey®



## CURRENT EVENTS

### Current Event

Use this form to complete current events.

\* Required

Your Name \*

Class \*

What is the title of your current event? \*

Put MLA citation here. \*

# Creating



Wikispaces



WORDPRESS



Piktochart



learnist

infogr.am

easelly



weebly



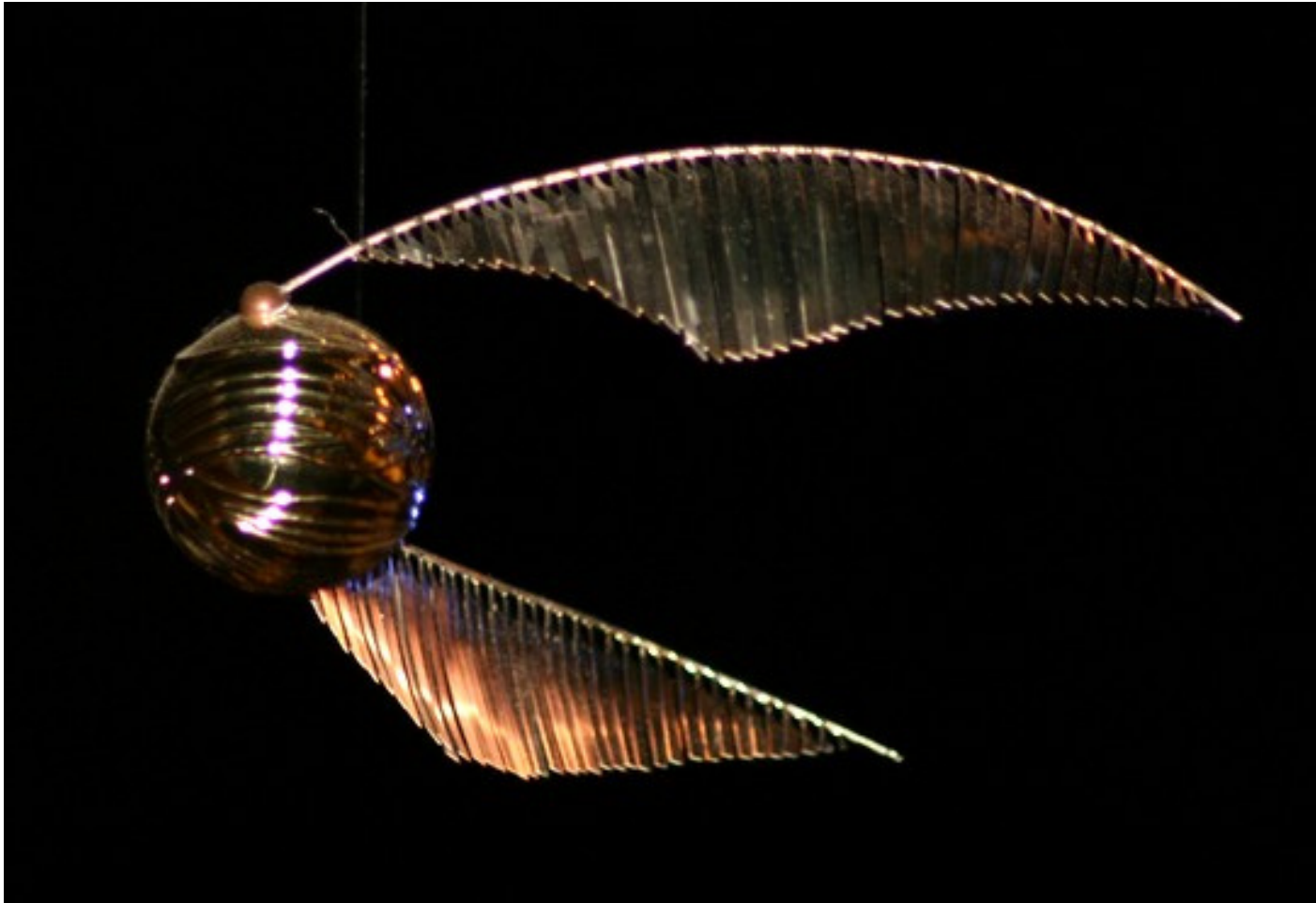
Prezi

# So, how did we do?

Can you...

- Identify how instructional technology tools can be used in a variety of settings to engage different learning preferences and create active learning opportunities?
- Synthesize principles for using instructional technology effectively in the context of your own teaching and learning environments to empower student learning?
- Use today's hands-on experiences using instructional technology tools to select at least one new tool you can use to empower students in their own learning, and share how this tool will be used in your teaching?

# Technology is a Moving Target!



Wilkes, A. (2012). Harry Potter Studio Tour 30 [digital image]. Retrieved October 7, 2013 from Flickr: [http://farm9.staticflickr.com/8426/8426112035\\_9a38bdcd06\\_b.jpg](http://farm9.staticflickr.com/8426/8426112035_9a38bdcd06_b.jpg)

# Questions?

Thank you!

# Technology Tools Discussed

## REMEMBER

- Zotero.com
- Diigo.com
- Evernote.com

## UNDERSTAND

- PollEverywhere.com
- Socrative.com

## APPLY

- Padlet.com
- Lino.com
- Screencast-o-matic.com
- Screenr.com
- Techsmith.com/Jing

## ANALYZE

- OnlineChartTool.com
- Create.ly
- Prezi.com
- Bubbl.us
- Text2MindMap.com
- MindMeister.com

## EVALUATE

- SurveyMonkey.com
- Forms.Google.com
- Chatzy.com

## CREATE

- Wikispaces.com
- Blogger.com
- WordPress.com
- Drive.Google.Com (docs, presentations, spreadsheets)
- Piktochart.com
- Learni.st
- Infogr.am
- Easel.ly
- Sites.Google.com
- Weebly.com
- Animoto.com
- Glogster.edu
- Prezi.com

# References

- Anderson, L. W., Krathwohl, D. R., & Bloom, B. S. (2001). *A taxonomy for learning, teaching, and assessing: A revision of bloom's taxonomy of educational objectives*. New York: Longman.
- Andrews, T. M., Leonard, M. J., Colgrove, C. A., & Kalinowski, S. T. (2011). Active learning not associated with student learning in a random sample of college biology courses. *CBE Life Sciences Education*, 10(4), 394-405. doi:10.1187/cbe.11-07-0061
- Bonwell, C. C. & Eison, J. A. (1991). *Active Learning: Creating Excitement in the Classroom*. ASHE-Eric Higher Education Report No. 1. Washington, DC: The George Washington University, School of Education and Human Development.
- Braxton, J. M., Jones, W. A., Hirschy, A. S., & Hartley III, H. V. (2008). The role of active learning in college student persistence. *New Directions for Teaching and Learning*, 2008(115), 71-83. doi:10.1002/tl.326
- Brown, J. S. (2002). Growing up digital: How the web changes work, education, and the ways people learn. *USDLA Journal*, 16(2)
- Campisi, J., & Finn, K. E. (2011). Does active learning improve students' knowledge of and attitudes toward research methods? *Journal of College Science Teaching*, 40, 38.
- Chickering, A. W. & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *American Association for Higher Education Bulletin*. Retrieved from <http://www.wtemp.lonestar.edu/multimedia/SevenPrinciples.pdf>
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
- Jung, C. J. (1971). *Psychological Types*. Princeton, NJ: Princeton University Press.
- Kolb, D. A. (1984). *Experiential Learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.
- Learning styles. (2012). In *Encyclopedia of Diversity in Education*. Retrieved from [http://huaryu.kl.oakland.edu/login?url=http://www.credoreference.com/entry/sagedived/learning\\_styles](http://huaryu.kl.oakland.edu/login?url=http://www.credoreference.com/entry/sagedived/learning_styles)
- Learning style theory. (2006). In *Elsevier's Dictionary of Psychological Theories*. Retrieved from [http://huaryu.kl.oakland.edu/login?url=http://www.credoreference.com/entry/estpsychtheory/learning\\_style\\_theory](http://huaryu.kl.oakland.edu/login?url=http://www.credoreference.com/entry/estpsychtheory/learning_style_theory)
- Obenland, C. A., Munson, A. H., & Hutchinson, J. S. (2012). Silent students' participation in a large active learning science classroom. *Journal of College Science Teaching*, 42, 90.
- Powner, L. C., & Allendoerfer, M. G. (2008). Evaluating hypotheses about active learning. *International Studies Perspectives*, 9(1), 75-89. doi:10.1111/j.1528-3585.2007.00317.
- Riener, C. & Willingham, D. (2010). The myth of learning styles. *Change*, 42(5), 32-35. Retrieved from <http://www.changemag.org/Archives/Back%20Issues/September-October%202010/the-myth-of-learning-full.html>
- Roehl, A., Reddy, S. L., & Shannon, G. J. (2013). The flipped classroom: An opportunity to engage millennial students through active learning strategies. *Journal of Family & Consumer Sciences*, 105(2), 44-49.
- Pashler, H., McDaniell, M., Rohrer, D. & Bjork, R. (2008). Learning styles: Concepts and evidence. *Psychological Science in the Public Interest*, 9(3), 105-119. doi: 10.1111/j.1539-6053.2009.01038.x
- Ross, A. & Furno, C. (2011). *Active learning in the library instruction environment: An exploratory study* The Johns Hopkins University Press.
- Fleming, N. (2012). VARK: A guide to learning styles. Retrieved from <http://www.vark-learn.com>
- Williams, J., & Chinn, S. J. (2009). Using web 2.0 to support the active learning experience. *Journal of Information Systems Education*, 20(2), 165-174.
- Willingham, D. (2009). Learning Styles Don't Exist. [Video file]. Retrieved from <http://www.youtube.com/watch?v=slvgrz2NTUk>
- Zayapragassarazan, Z. & Kumar, S. (2012). Active learning methods. *NTTC Bulletin*, 19(1), 3-5.