Technology and Religion

Lesson 3: Algorithm and Authority

3.3.2019

Objectives: Explore our trust in digital technology as authoritative source.

Materials: Flipchart, slips of paper for trivia activity, blindfold, treats for prize.

Time allotments suggested for 50 minute class, followed by 25 minute closing service.

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1. **Nametags and Graffiti Wall** (5 minutes before class begins)
   - Make nametags using blank paper, markers, and holders. Youth can create their own unique but LEGIBLE nametag. Make it a regular practice to wear nametags.
   - "Graffiti Wall" questions: Write the following on whiteboard. Invite youth as they arrive to grab a marker and weigh in with their responses:
     - What online source is your regular Go-To for information?
     - Have you ever followed news that turned out to be "fake"?
   - Teachers complete attendance sheets.

2. **Silly Fun: "Guess Who Loves You"** (5 minutes max)

   Put a chair in the middle of the room. Have everyone stand in a circle around the chair. Get a volunteer to be "IT," who sits in the chair with blindfold over eyes. Shuffle the circle around. Teacher points silently to one of the youth, who then DISGUISES voice and says "Guess who loves you" and "IT" tries to guess the correct identity. Give anywhere between one and three guesses, depending on the size of the class. If "IT" guesses incorrectly, "IT" has to take one more turn.

3. **Chalice Lighting:** Light the chalice, saying these words together: *"We light this chalice as a symbol of our faith, the light of truth and the warmth of love."*

   Teacher reads: (from three anonymous posts on internet)
   - *"Life is like Google: you just need to know what you're searching for."*
   - *"Love is like Google: you have to go through a lot of spam before you find what you're looking for.*
   - *"Hey, Google! Why don't you let me finish what I'm typing before you start guessing after one letter?!"*

4. **Learning Activity: Who said so?!** (20 minutes)

Youth will do a search process that gets at the origins of *Google* as search engine. They will search to find the correct answer to a trivia question by asking one another in pairs. One youth "expert" will have the correct answer drawn from random slips of paper. The goal is to have the WHOLE group know both the correct answer and the identity of the "expert."

Give careful instructions:

1) Instruct youth that the goal is to have the WHOLE group search and discover the correct answer to a trivia question. There may be youth who can guess or know already, but ONE hidden "expert" will actually have the correct answer drawn from among random slips of paper. *Bonus prize if the group can guess the identity of the hidden expert.*
2) Youth will move about the room, talking in pairs (or triplets if needed), and QUIETLY offer each other their best answer. The talking is to be contained in pairs.
3) Whether they know the answer or not, each youth *must* offer their best guess to the trivia question. **But they can pass along whatever they have heard from others!**
4) The "expert" will also offer an answer and ***importantly*** ***mention the fact that they are the expert*** as they move about during the sharing. (The idea is that youth will begin to reference and pass along the expert's authoritative answer as they go from pair to pair. And remember, there's bonus prize for identifying the hidden "expert.")
5) Teacher ensures exact number of paper slips for each youth present, including one slip that has the "expert" answer. Have youth draw slips of paper from basket, look at it, then return slips back into basket.
6) Read aloud first trivia question: What do the letters "m" and "m" stand for in the chocolate candy M&M's *(Answer: **M**ars & **M**urrie, from founders of the candy, Forrest Mars and Bruce Murrie.)*
7) Stop after few minutes and see if the WHOLE group arrived at the answer and the identity of expert. Give a treat to any/everyone who knows the hidden expert.
8) Go another round with trivia question: What was the original color of Oscar the Grouch before green, and how did Oscar explain his color change? *(Answer: Before Jim Henson decided to make him green on the second season of* Sesame Street, *Oscar was orange. Oscar explained that he went on vacation to the very damp Swamp Mushy Muddy and turned green overnight.)*

Questions for Discussion:

- Did the group arrive at the correct answer to trivia questions?
- Whose answer had more authority or was more trustworthy?

- So what method or process was at work that ultimately led to everyone finding the correct answer? *(The method, of course, focuses on citing or referencing the expert's answer. This method is an example of an **algorithm**, a formula for processing data in computer science.)*

5. **Algorithm and Authority:** (5 minutes)

   Teacher summarizes: The learning activity offers a simple understanding of *Google's* search algorithm at work whenever we search the web. In August 1996, Larry Page and Sergey Brin released Google as an ingenious algorithm to the vexing problem created by the world wide web: *Who should we pay attention to among billions of information sources out there? What sources can we trust?* Certain newspapers and television networks had gained the reputation and trust of the public and interpreted news and information for us, but the web expanded expertise and potentially made anybody an expert. And companies like *Yahoo* were jockeying for position on the popularity contest. But Brin and Page understood that popularity was not the same as having expertise or authority about a subject matter.

   Brin and Page, graduate students at Stanford University, understood that good, authoritative, and trustworthy information meant sharing your work with peers, getting their reviews, and having them cite your work in their own work. The more influential and significant your work, the more likely that it would be referred to and cited by others. For Brin and Page, ***the source*** that was being cited/credited the most proved to be a valid way to count for authority on the internet. Respect for origins carried more weight than self-promoting popularity. In other words, *Google* was a new algorithm—a formula for processing data—that was built on the importance of footnotes! (Remember the learning activity where youth were likely footnoting the expert.) While other search engines had algorithms that focused on key words, *Google's* algorithm instead focused on tracking the links that connected webpage to webpage backwards and forwards from their original source.

   Google's algorithm enabled users to organize the world's information, and to organize it in a better way than other search engines had been going about it.

6. **Questions for Discussion** (20 minutes)

   - Think about *Google*, media, or even libraries as organizers of knowledge. How are they powerful? How do they shape our lives? *(Help youth provide examples like ones listed below:)*
     - They can decide what counts as knowledge: Galileo's heliocentric theory versus the geocentric theory of the Catholic Church at the time. Books advocating for the heliocentric theory were on the list of banned books.
     - They can promote or conceal certain knowledge: *Fox News* and *The Daily Show* with Jon Stewart/Trevor Noah .

    - They can take over the work of knowing for us: autocomplete function anticipates our search and fills in the blanks for us. *Wikipedia* makes knowledge instantly available to us.

- Imagine doing a research assignment: If there was an algorithm that would not only search for key words but actually read through entire articles/books and determine which ones deserve your time and attention, would you give it such authority?
- Consider many other algorithms that shape our lives: *Google Maps'* driving suggestions; *Netflix's* recommendations based on our viewing history; *Amazon's* recommendations of books; *eHarmony* and online matchmaking services. Should we click on the "most viewed," "most liked," "most emailed"? What are the pros and cons of such algorithms?
- *Google* and *Netflix* remember our digital footprints. Their algorithms know and keep our search history. In personalizing our web experience, do algorithms come to know us better than ourselves? Or do we go along with thinking that they know us?
- What kinds of searches do you *Google* and what kinds of searches would you never *Google*?
- Searching and seeking have always been an essential part of the religious journey. But the spiritual search was rarely easy or quick, often requiring long periods of waiting and wondering and getting lost. What algorithms or methods do/would you access for that kind of search?

7. **Extinguish the chalice**, saying together:

   "*May the light of truth and the warmth of love go with us in our hearts.*"

8. **Help clean up classroom** before leaving: Please keep regular practice of readying classroom for the next class.
   - leave lesson plan and all materials organized
   - wipe the whiteboard clean
   - tables and chairs neatly returned
   - nametags collected in Ziploc bag
   - leave any comments for RE staff on attendance sheets