



# Evaluating the Impact of Face-to-Face and Online

Information Literacy and Writing Skills Instruction  
Using a Mixed Methods Research Design

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University of Guelph

# AGENDA

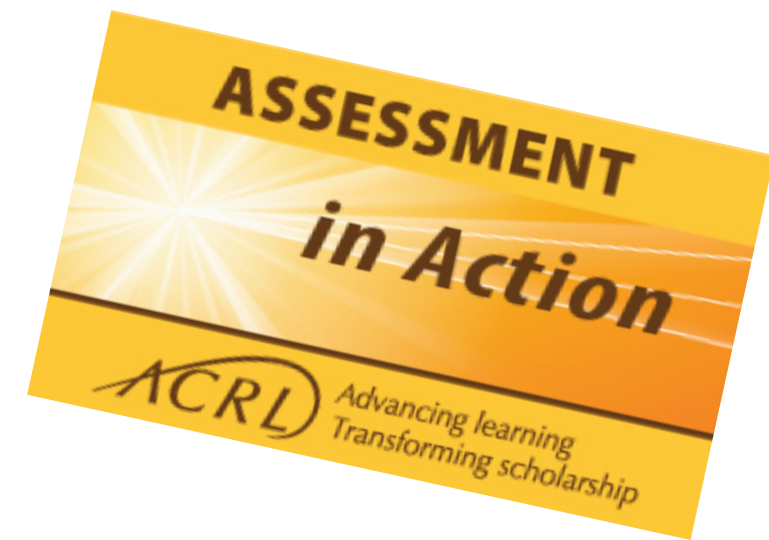
- **Our Project**
- **Data**
  - **Quantitative**
  - **Qualitative**
- **Coding Activity**
- **Lessons Learned for Research**
- **Lessons Learned for Practice**

# AIA & Action Research

- Team-based
- Focus on library's impact on student success

## Action Research

- Inquiry conducted by practitioners to improve practice
- 7 steps



# MGMT 1000

- We knew we were going to be looking at Problem-Based Learning (PBL) assignments
- Required course for all B. Comm. (800 first-year students)

## **MGMT\*1000 Introduction to Business F (4-0) [1.00]**

This course is intended for B. Comm. students in semester one. It provides students with an understanding of the evolution of forms of business organization and their role in social and economic development. The main focus is on current economic, social and environmental issues that impact business organizations and which, in turn, are impacted by business decisions. Ethical considerations and the concept of sustainability are essential components. Students develop oral and written communication skills in small seminar groups. School of Hospitality and Tourism Management.

*Restriction(s):* CME\*1000. Registration in B. Comm. and fewer than 7.50 credits.

# Research Questions

What practices do students engage in when finding, selecting and citing information in their assignments?

What impact do face-to-face and online instruction have on the information literacy and writing skills of MGMT students?

# Research Design

- Consent
- Intervention
- Pre-/post test using PBL assignments
- Focus groups
- Confidence and satisfaction scales

# Matrix

Thursday	Friday	Monday	Tuesday	Wednesday
Writing: Online	Writing: F2F	Writing: Online	Writing: F2F	Writing: Online
Research: Online	Research: F2F	Research: F2F	Research: Online	Research: Online
Sections: 5	Sections: 3	Sections: 5	Sections: 5	Sections: 4



# Design: Learning Outcomes

## Information Literacy Outcomes

**At the end of the class, students will be able to:**

- Identify relevant types of information sources for the assignment, including journal and news articles, statistical data or company information
- Apply criteria such as relevance and authority in order to select sources that support their argument










# Design: Learning Outcomes

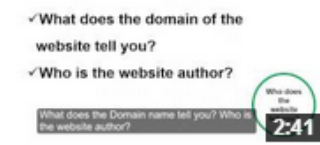


## Writing Outcomes

**At the end of the class, students will be able to:**

- Describe when to cite sources
- Describe why citing sources is important
- Create a list of References correctly using APA style
- Use in-text citations effectively to support claims that require evidence

# Design: Online Modules

<b>Introduction to MGMT 1000 Library Course Guide</b> ▾	
 <a href="#">Introduction to MGMT 1000 Library Course Guide</a> ▾	✓
<b>Find Information Using ABI/INFORM</b> ▾	
 <a href="#">Find Information Using ABI/INFORM</a> ▾	✓
 <a href="#">Test Your Knowledge: Find Information in ABI/INFORM</a> ▾	✓
<b>Using Get it! Guelph to Connect to Sources</b> ▾	
 <a href="#">Using Get it! Guelph to Connect to Sources</a> ▾	✓
<b>Why You Should Evaluate Your Sources</b> ▾	
 <a href="#">Why You Should Evaluate Your Sources</a> ▾	✓
<b>Evaluate Your Sources for Authority</b> ▾	
 <a href="#">Evaluate Your Sources for Authority</a> ▾	✓
 <a href="#">Test Your Knowledge: Evaluate Your Sources for Authority</a> ▾	✓

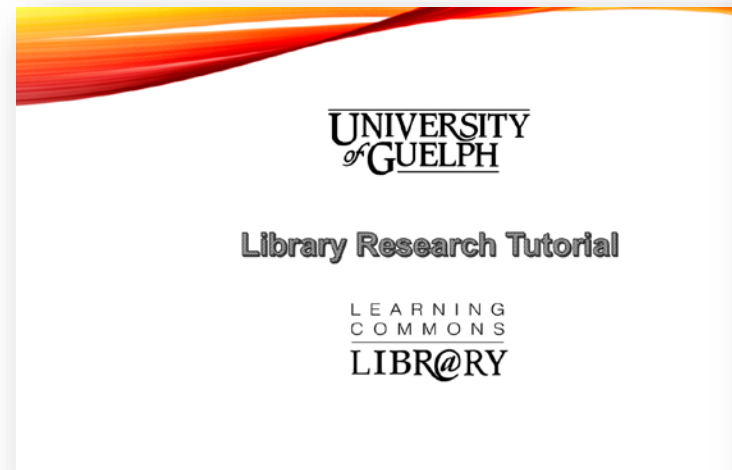
 <p>✓What does the domain of the website tell you? ✓Who is the website author?</p> <p>What does the Domain name tell you? Who is the website author?</p> <p>2:41</p>	<b>Choose the Best Info: Apply Authority</b> 4 months ago • 68 views This short Library video will help you evaluate your information sources for Authority. What is Authority?...
 <p>What type of information are you required to use?</p> <p>What type of information are you required to use?</p> <p>2:26</p>	<b>Choose the Best Info: Apply Relevance</b> 4 months ago • 43 views This short Library video will help you evaluate your information sources for relevance. What is Relevance?...
 <p>Source Type</p> <p>For example, you might choose Scholarly Journals, Newspapers, Magazines or Trade Journals. Click more options to view all options.</p> <p>3:58</p>	<b>Find Stuff in ABI/Inform</b> 4 months ago • 35 views This short Library video will help you search and find stuff in ABI/INFORM. ABI/INFORM is a Business Database that you have access to as a member of the University of Guelph...

## Research Module

- Used CourseLink (D2L CMS)
- 6 sections
- Included 6 Videos and Test Your Knowledge (Self-Assessment Questions)

# Design: Face-to-Face

- Time Constraint: 30 minutes (each for Writing / Research)
- Application Activity
- Observed issues



COLUMN Koehn HBR.ORG

Nancy Koehn is a historian and the James E. Robinson Professor of Business Administration at Harvard Business School.



goal is to maximize profit, you're on a collision course with time."

**Live the adage "From those to whom much is given, much is required."** Starbucks and Unilever may have a resource advantage, but they use their brand, visibility, and scale to blend capitalism with activism to influence change. Polman tackles global malnutrition; Schultz addresses other big-picture issues such as job creation and political disunion. And people respond. When Schultz called on major corporations to halt all political campaign contributions until the U.S. government solved the budget deficit, nearly 200 top executives of major companies signed on. He's resolute: "Business leaders cannot be bystanders."

**Fail and keep learning.** While other CEOs talk about change, Polman is grafting measurable sustainability onto Unilever's DNA. His goals are ambitious: reduce the greenhouse gas impact of Unilever products by 50%; source 100% of raw materials sustainably; help one billion people improve hygiene. Such transformation is not without risks: If successful, Polman will be a role model; but if Unilever falters, critics will call for his head. He understands that to address social issues, business must experiment and innovate.

Schultz and Polman represent a growing corps of 21st-century leaders who are demanding bigger, bolder things of business—not primarily as a moral obligation (although that's very important) but as an imperative for enduring organizational success. In the next decade we'll see others forge their own models, just as we'll see the decline of companies that cannot summon the moral courage demanded by principled leadership.

Unilever's goal is to "stay close to society to guarantee our future." Polman says that what he's doing is "nothing special." But if his and Schultz's actions motivate others to follow, the impact will be extraordinary.

HBR Reprint F1211F ILLUSTRATION: KEVIN MAZUR

## The Brain—and Soul—of Capitalism

In 1970 the economist and Nobel laureate Milton Friedman called corporate social responsibility "hypocritical window dressing," saying that businesspeople inclined toward it "reveal a suicidal impulse." How times have changed. Some executives still take a Friedmansque view, but most accept social and civic responsibilities as indispensable to doing good business; their enterprises won't survive if those responsibilities are ignored.

**Keep in mind that capitalism needs a brain and a soul.** Solving today's burning issues—social, environmental, political, and financial—requires bigger goals, new incentives, and a reconception of what business really is. It also requires leaders with moral muscle who are willing to pursue sustainable goodness and positive impact despite colossal challenges. Starbucks CEO Howard Schultz and Unilever CEO Paul Polman are champions in this movement: Their long-term missions and pursuits are models for building companies to last.

**Invest in people above all.** A company's most important assets—mission, reputation, and people—are not on the balance sheet. Schultz is deeply invested not only in Starbucks's 200,000 partners (employees) but also in its global coffee bean farmers. Whether offering stock options and health coverage to part-time U.S. workers, hosting "family partner forums" for employees' parents in Beijing and Shanghai, or donating cows to coffee farmers in Rwanda, he sees enlightened decision making as smart business. Health benefits and parent engagement build trust among employees; cows for coffee farmers strengthen loyalty and productivity. "To be a benevolent organization, you have to make a lot of profit," he told *Fortune* in 2011. "But if your sole

**Starbucks and Unilever use their brand, visibility, and scale to blend capitalism and activism to influence change.**

44 Harvard Business Review November 2013

# Design: Surveys

- Confidence (Likert)
- Satisfaction (Likert)
- Perceived value (“recommend”)
- Print Survey in Class / Optional Online

MONDAY

## MGMT\*1000 LIBRARY RESEARCH SKILLS PRESENTATION EVALUATION FORM

After watching the library research skills presentation, please indicate how confident you feel about the following:

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I can do a keyword search in the ABI Inform database	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When searching the ABI Inform database, I am able to select the most relevant sources by looking at the source type, scanning the subject headings, and reading the abstracts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When searching the ABI Inform database, I am to manipulate the result list using filters such as date and publication type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can use the <u>Getit</u> Guelph button to retrieve sources not available in the ABI Inform database	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can define relevance in my own words	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can apply criteria such as publication type, intended audience and content in order to increase the relevance of a source	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can identify five basic criteria to consider when citing sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please tell us how you would rate the content and pace of the library research skills presentation:

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The amount of content was appropriate for my learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The pace was appropriate for my learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I would recommend the library research skills presentation to a classmate

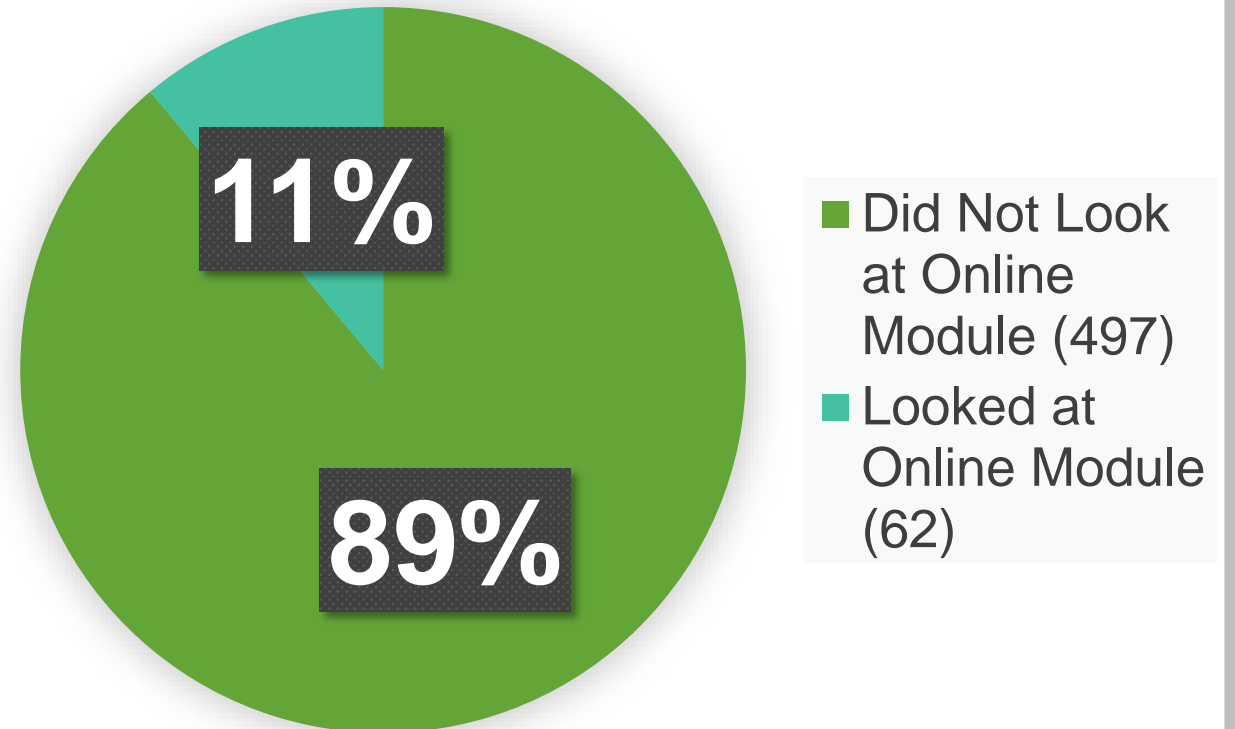
Yes     No     Not sure

# Quantitative Data

- Quality improvement
- Internal
- 559 students should have looked at the online Information Literacy Module



Online Module Activity: Research



# Roadblock

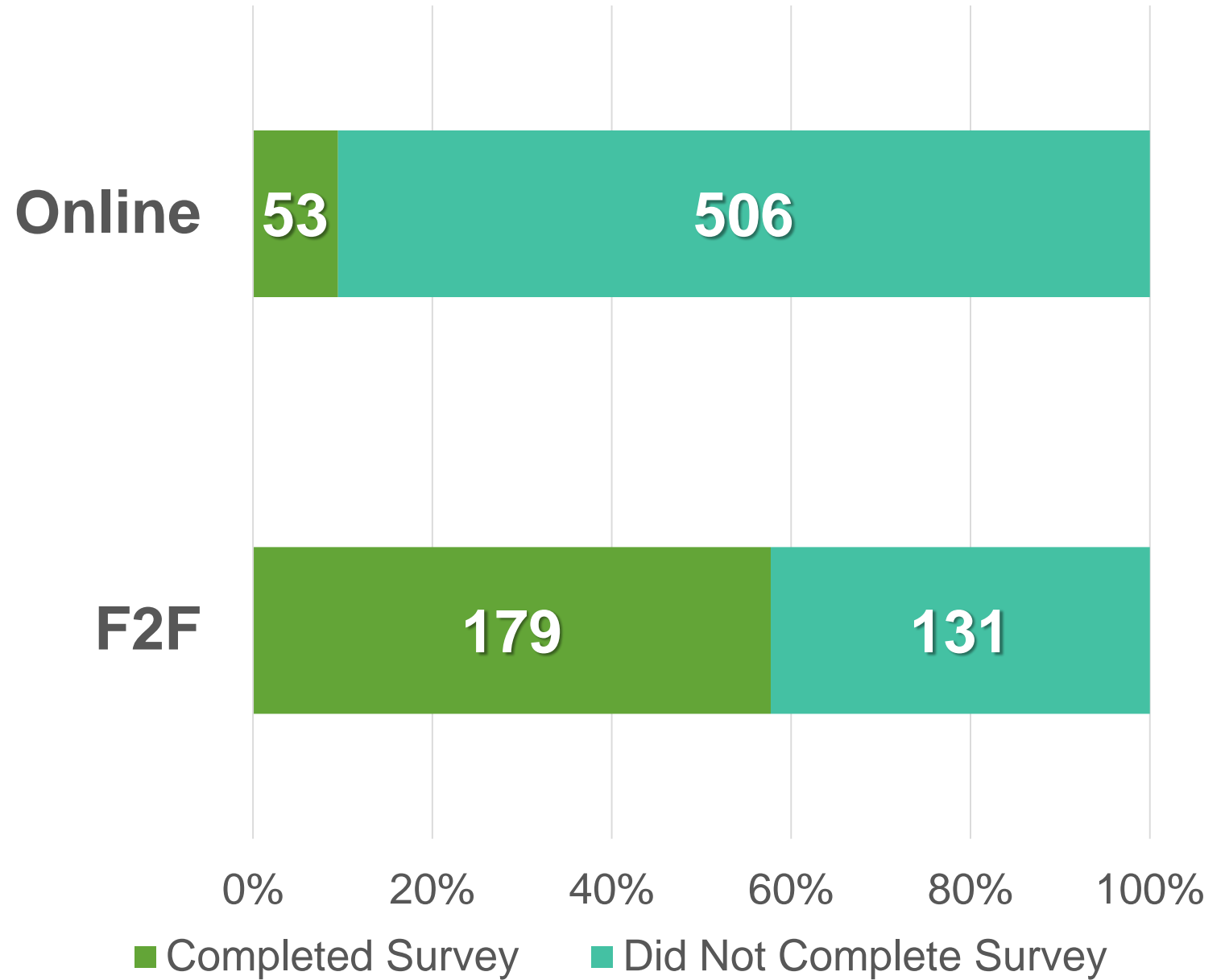


- Some students who watched the modules shouldn't have been able to see them.
- Most of the students who should have looked at the modules didn't.



# Survey Responses

## Information Literacy: Survey Response Rates

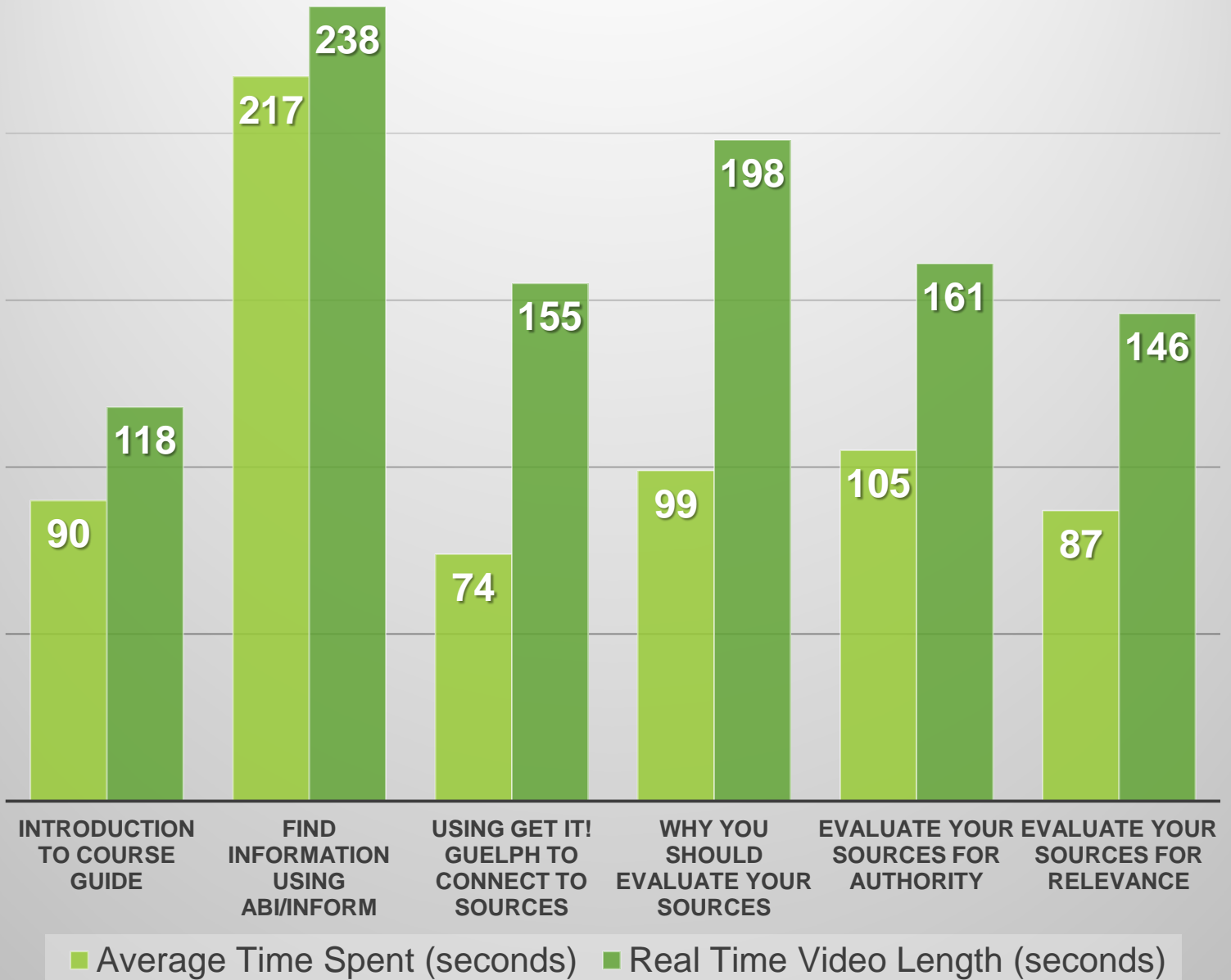




# Videos



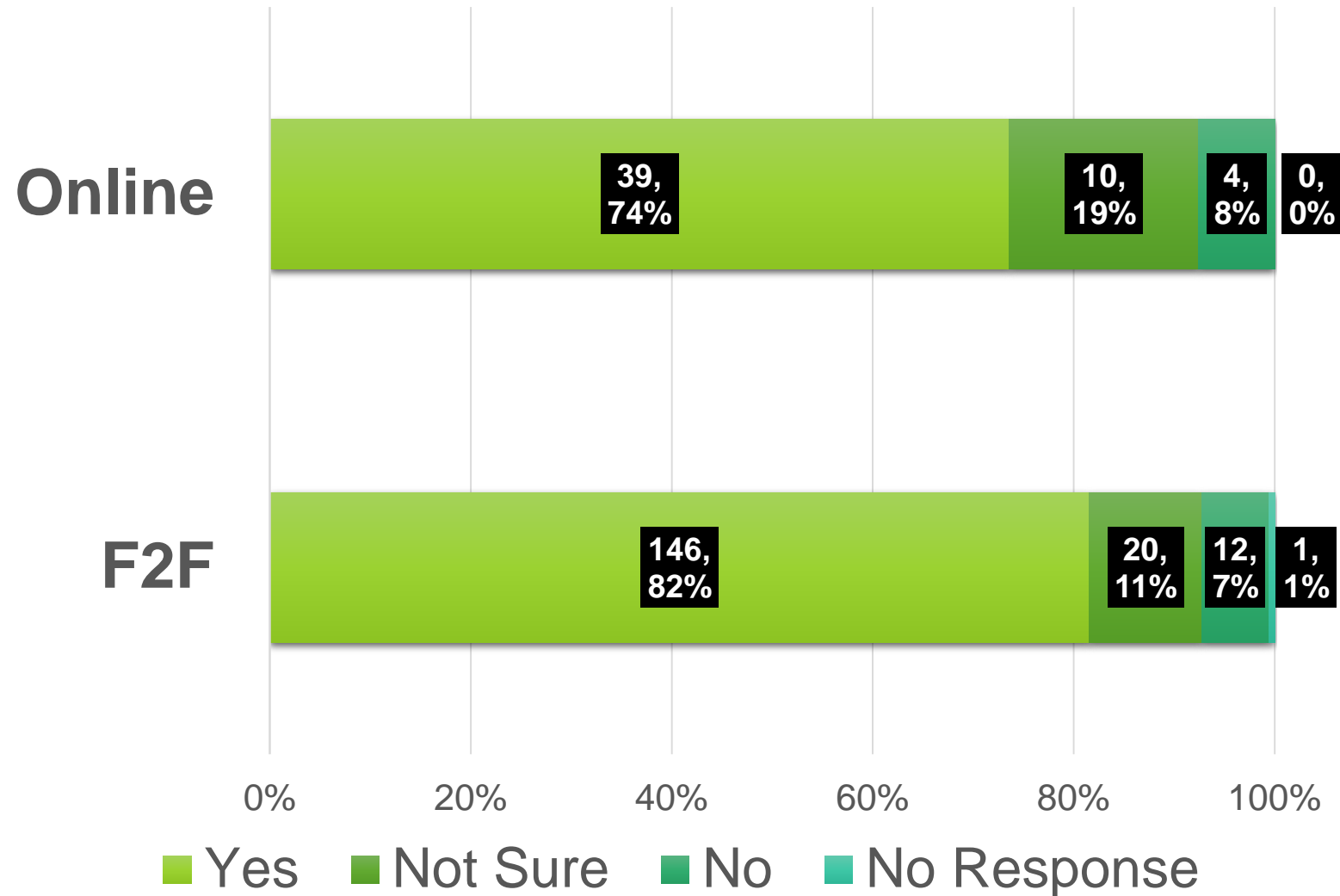
## Time Spent Watching Videos



# Perceived Value



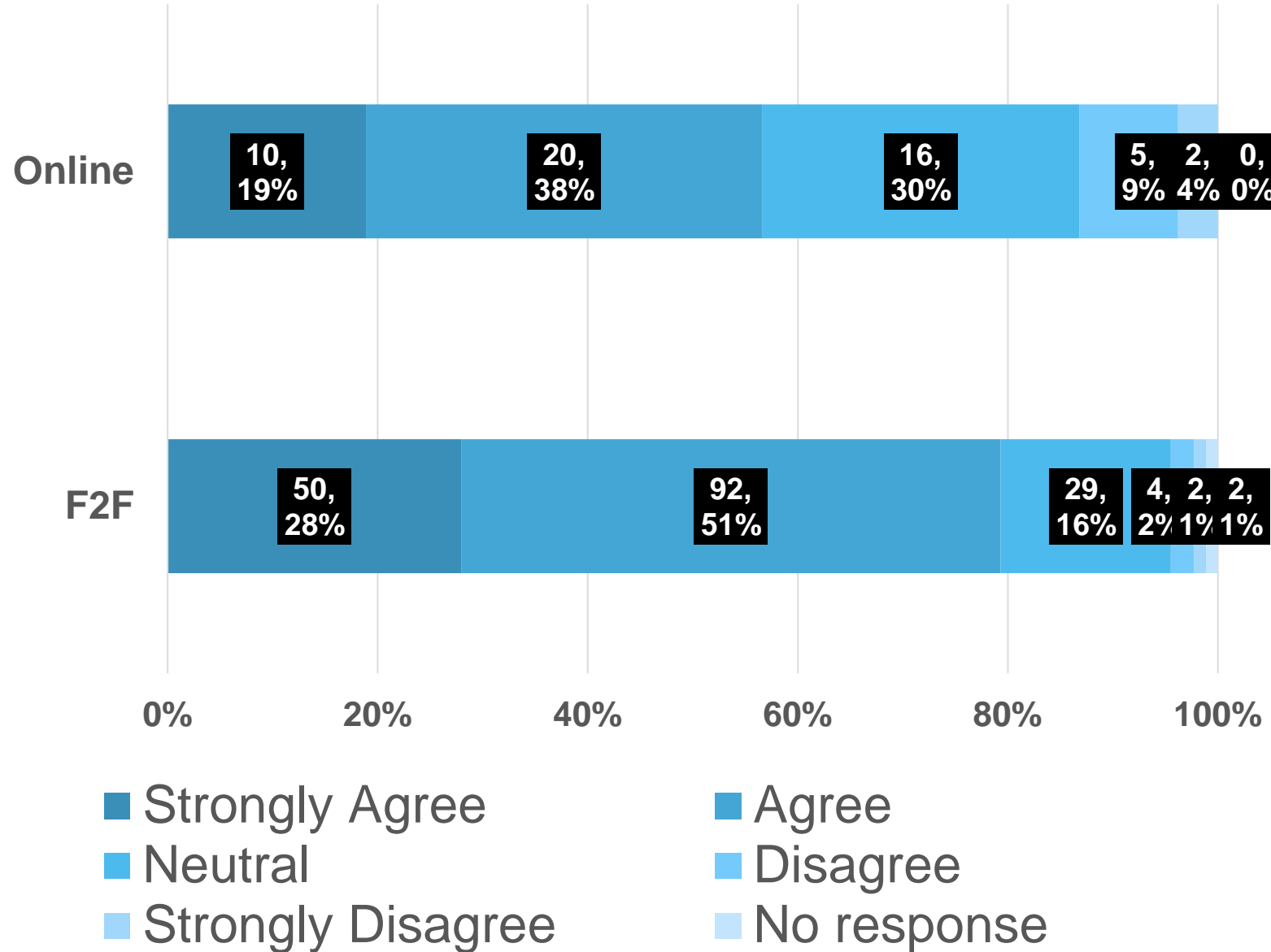
I would recommend the library research skills presentation to a classmate *or* I would recommend the library research skills videos to a classmate.



# Confidence



I can **apply criteria** such as publication type, intended audience and content in order to **increase the relevance** of a source.

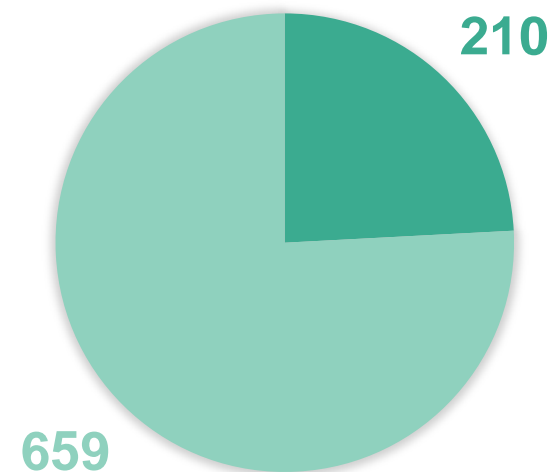


# Qualitative Data



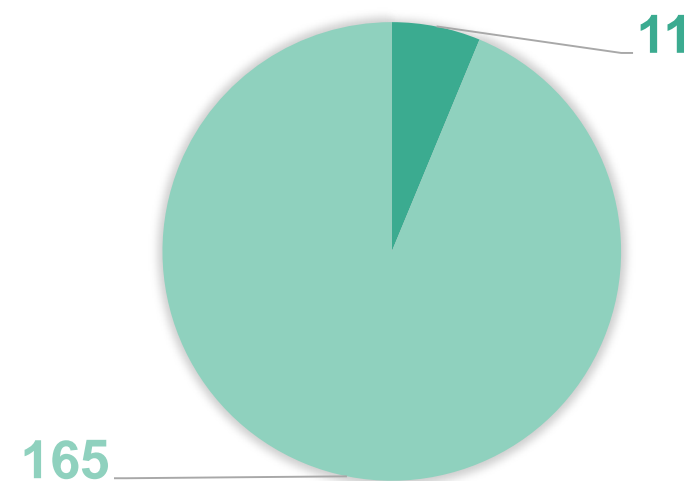
## CONSENTING STUDENTS

- Consent
- No Consent



## CONSENTING GROUPS

- Consent
- No Consent





# PBL Assignments



- **Problem-Based Learning Business Report**
  - Role of “Business Analyst”
  - Recommend a decision
  - Make a case for decision through research, well-written arguments, and exploring all sides of the issue

## MGMT\*1000 • Problem-Based Learning Business Report Format

The purpose of this document is to detail the requirements of the “Business Reports” your Problem-Based Learning (PBL) Team will submit to the DropBox at CourseLink in Weeks 09, 10, 11, and 12. The Business Report format is based on that found in the recommended (but not required) *Making Sense* book by Northey and McKibbin.

### **Technical Requirements:**

Like the Micro-Tyco Team’s Business Plan document, your PBL Team’s Business Reports should be single-spaced, 12-point serif font (e.g., Times New Roman, Cambria, Century Schoolbook, et al). Citations should be “in text” citations (no footnotes) and along with the references must be in APA style. Your document must be saved in PDF—Portable Document Format! Include your Team’s Number (e.g., 0208-PBL-06) at the top of the first page—there is no need for a separate cover page. Include all of your team member’s names and student ID #'s. All the business reports for all the PBL problems should be 8-10 pages in length, *excluding* any extra pages for references, exhibits, etc.

### **Content Requirements:**

You can think of your team as having the role of “Business Analyst”. A decision maker has come to seek your advice on an issue. Your team will examine the issue (problem) from a number of different points of view and then recommend a decision to the decision maker. In the sample problem we will do in seminar in Week 08, you are a reporter with a snowboarding magazine and you need to make a recommendation to your editor—should the magazine report on the story about the snowboarders refusing the Red Bull sponsorship deal. If they should not report it, why not? If they should report it, is there any ‘spin’ they should put on the story? If so, why so? **There is no right or wrong answer to these problems!** There are, however, varying degrees to which you can make your case for the decision your team chose. Your team’s mission then, is to make a compelling case for the decision through research, well-written arguments, and exploring both sides (all sides!) of the issue.

# PBL: Themes and Topics



Rehtaeh Parsons  
Apparel Industry  
Privacy  
Bangladesh  
Sexist Tweets  
Problem-Based Learning  
Toronto Fire Service  
Walt Disney  
Twitter  
Current Events  
Joe Fresh  
Abercrombie  
Facebook

# Roadblock



- We can't generalize or demonstrate correlation.
- We can only use a case study approach.



# Sampling



- We selected PBL assignments 2 and 3 for analysis (because pre-/post).
- Within the groups that had consented, we selected one group that had each type of treatment.

Group	Day	Research	Writing	TA
121-06	Friday	F2F	F2F	Luke
101-03	Wednesday	Online	Online	Dany
214-03	Tuesday	Online	F2F	Naman
209-05	Monday	F2F	Online	Marlee

# Roadblock



- Focus Groups

# Coding



## References

Chan C. (2012) "What Facebook Deals with Everyday"  
<http://gizmodo.com/5937143/what-facebook-deals-million-photos-uploaded-and-500-terabytes-of-data>

Hahn P. (2013) "Dating Website Regrets Using Rate News"  
<http://www.ctvnews.ca/canada/dating-website-in-ad-1.1459673>  
<http://www.ctvnews.ca/canada/dating-website-regrets-1.1459673>

Liedtke, M. (2013, October 17). *Facebook relaxes rules for teens*,  
from <http://globalnews.ca/news/906990/facebook-relaxes-rules-for-teens/>

Marsh, J. (2013, September 19). *Model sues after losing job*  
<http://nypost.com/2013/09/19/woman-sues-georgian-college-after-losing-job/>



# Activity

## Code #11 & #12 for:

- ✓ News
- ✓ Government source
- ✓ Journal article
- ✓ Wikipedia
- ✓ Company Information or Document
- ✓ Book
- ✓ Website
- ✓ Magazine article
- ✓ Other or Unknown

### References:

BBC. (2010, July 09). China dairy products found tainted with melamine. Retrieved from <http://www.bbc.co.uk/news/10565838>

Consumer confidence. Manuscript submitted for publication, Department of Economics, University of Lethbridge, Alberta, Canada. , Available from ScienceDirect. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0195666310003685>

DeVeau, T. M. Naturally Confusing Consumers: Express Federal Preemption of State Claims regarding False and Misleading Food Product Labels.

Evidence from a nature experiment in china. (Master's thesis, Huazhong University of Science & Technology, Wuhan, China), Available from ScienceDirect. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0306919212000309>

Fairchild, G. F., Nichols, J. P., & Capps, O. (2003). Observations on economic adulteration of high-value food products: The honey case. *Journal of Food Distribution Research*, 34(2), 38-45. <http://ageconsearch.umn.edu/bitstream/27319/1/34020038.pdf>

Figlewicz, D., Ioannou, J., Bennet, J., Kittleson, S., Savard, C., Roth, C. (2009). Effect of moderate intake of sweeteners on metabolic health in the rat. *Physiology and Behaviour*, 98(5), 618-624.

Horowitz, B. (2003). Under fire, food giants switch to healthier fare. *USA Today*, 1, 1A.

Ioopolito, P. M., & Mathios, A. D. (1991). Information, advertising, and health choices: A study of the cereal market. In *Economics of Food Safety* (pp. 211-246). Springer Netherlands.

Klein, K. K., Guo, T., & Qiao, G. (2010). Melamine in chinese milk products and

Kong, D. (2012). Does corporate social responsibility matter in the food industry?

Mandelkehr, H. M. (2013). When Toning Shoes Strengthen Nothing More Than Likelihood of Lawsuit: Why the Federal Trade Commission Needs Guidelines Regarding Proper Substantiation of Fitness Advertisements. *Vill. Sports & Ent. LJ*, 20, 297-297.

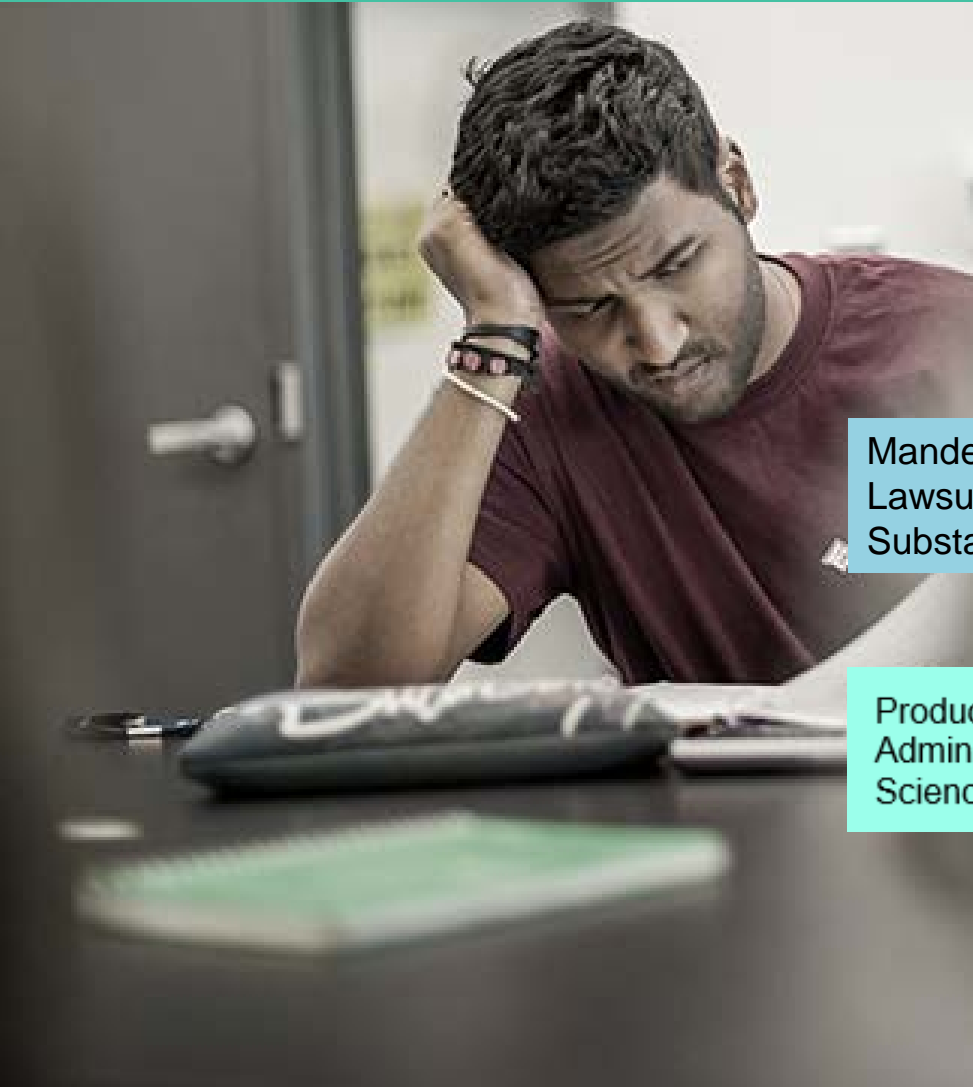
Product recall announcements in china. Manuscript submitted for publication, School of Business Administration, South China University of Technology, Guang Zhou, China. , Available from ScienceDirect. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0925527312004598>

Smolin, L., Grosvenor, M., Gurfinkel, D., (2012). *Nutrition: Science and Applications*. Location: John Wiley & Sons Canada, Ltd.

White, J. S. (2008). Straight talk about high-fructose corn syrup: what it is and what it ain't. *The American journal of clinical nutrition*, 88(6), 1716S-1721S.

Zhao, X., Li, Y., & Flynn, B. B. (2013). The financial impact of product recall announcements in china. Manuscript submitted for publication, School of Business Administration, South China University of Technology, Guang Zhou, China. , Available from ScienceDirect. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0925527312004598>

# Format as Process



Mandelkehr, H. M. (2013). When Toning Shoes Strengthen Nothing More Than Likelihood of Lawsuit: Why the Federal Trade Commission Needs Guidelines Regarding Proper Substantiation of Fitness Advertisements. *Vill. Sports & Ent. LJ*, 20, 297-297.

Product recall announcements in china. Manuscript submitted for publication, School of Business Administration, South China University of Technology, Guang Zhou, China. , Available from ScienceDirect. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0925527312004598>



# Rubric: Sources of Data

<b>(A) Excellent</b> 18 - 20 points	<b>(B) Good</b> 14 - 17 points	<b>(C) Acceptable</b> 10 - 13 points	<b>(D) Minimally Acceptable</b> 6 - 9 points	<b>(F) Fail</b> 0 - 5 points
Contains effective scholarly research that incorporates sophisticated sources (e.g., journal articles) in support of the decision.	Incorporates valid sources (e.g., top quality news sources; edited/reviewed texts) in support of the decision.	Contains adequate sources (e.g., news sources) that only tangentially support the decision.	Incorporates inadequate (e.g., Wikipedia, blog posts, non-edited/reviewed sources) or inadvertent sources that fail to support the decision.	Sources are absent or plagiarism has occurred or citations are not associated with references (vice versa).

# Roadblock

A close-up photograph of a brick wall. The bricks are arranged in a traditional pattern, with some bricks being light-colored (tan or beige) and others being dark grey or black. The mortar is a light grey color. At the top of the image, there is a solid yellow horizontal banner with the word "Roadblock" written in white, sans-serif font.

- Rubric and assignment requirements don't align
- TAs inconsistent across the groups but also not consistent within their own groups
  - Might not grade the same way we might have
  - We need to teach the TAs differently
- Teaching Format / Citations



# Lessons Learned: Practice

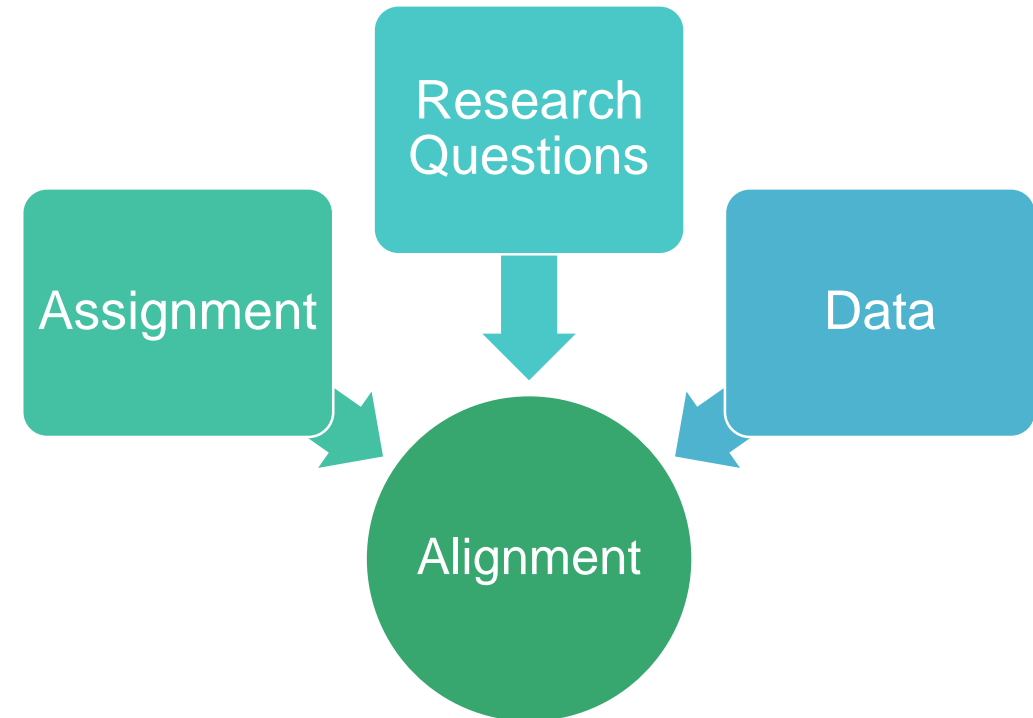


- Value of the one-shot
- Siloed approach artificial: research and writing separate; focus on mechanics of search
- Constructive alignment
- Rubric + assignment + TAs + what students (think) they know
- What we presented and requirements of assignment

# Lessons Learned: Research



- “Data” person from the start
- Simplify the experiment – we had too many research questions
- Group Assignments not ideal when gathering consent
- You have to get people to your focus group
- Ensure research question can be answered by experiment
- Redundancy



# Research Questions Answered?

What practices do students engage in when finding, selecting and citing information in their assignments?

What impact do face-to-face and online instruction have on the information literacy and writing skills of MGMT students?

# Questions?

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Karen Nicholson

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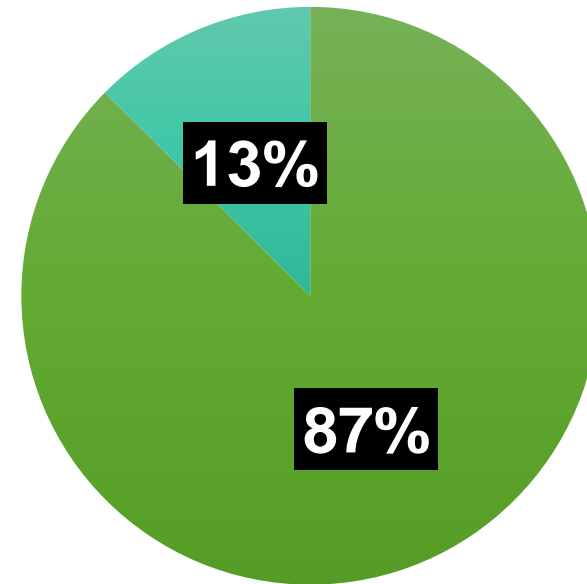
@nicholsonkp 

# Quantitative Data

- Quality improvement
- Internal
- 556 students should have looked at the online Writing Module



Online Module Activity: Writing

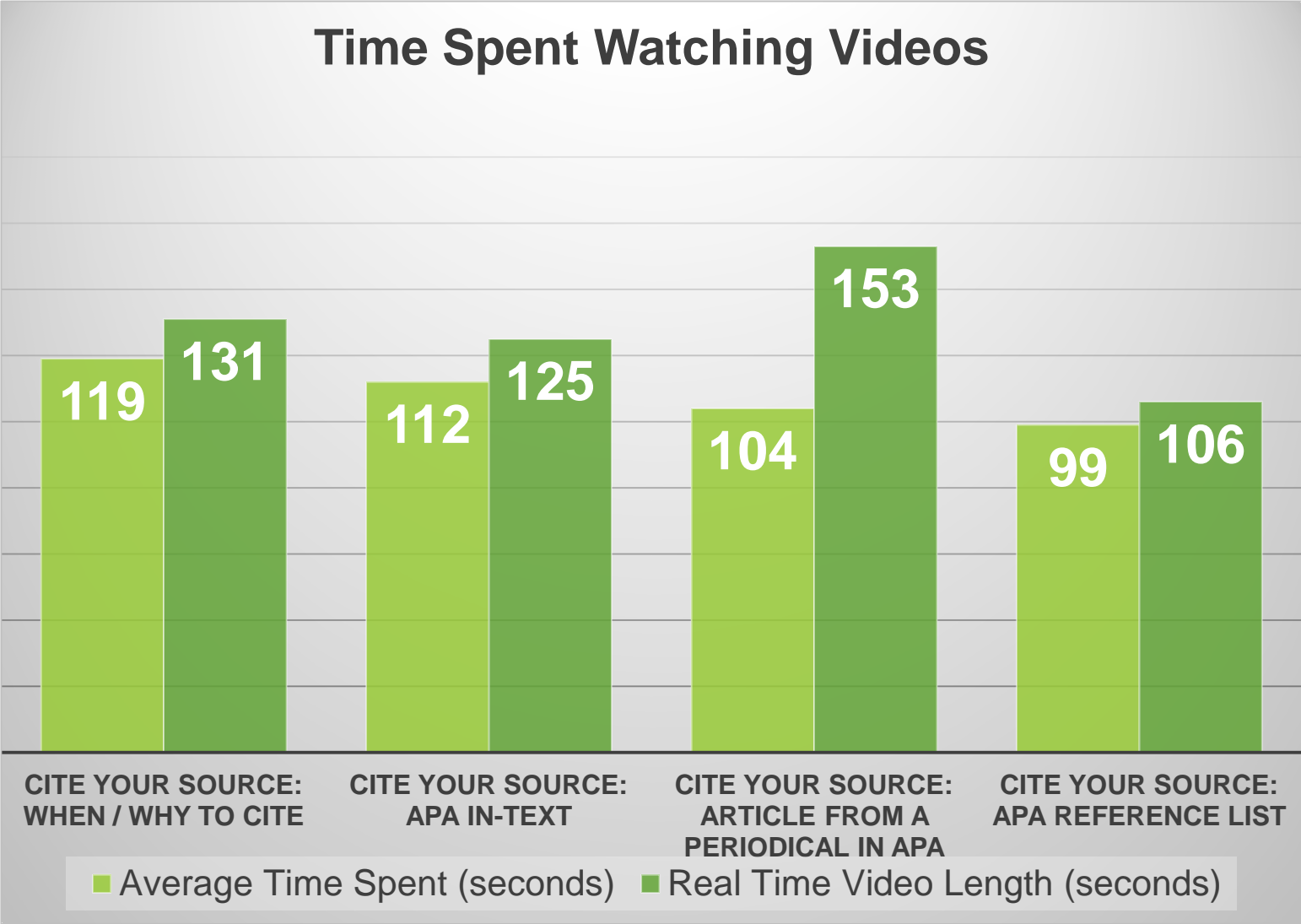


- Did Not Look at Online Module (486)
- Looked at Online Module (70)

# Videos



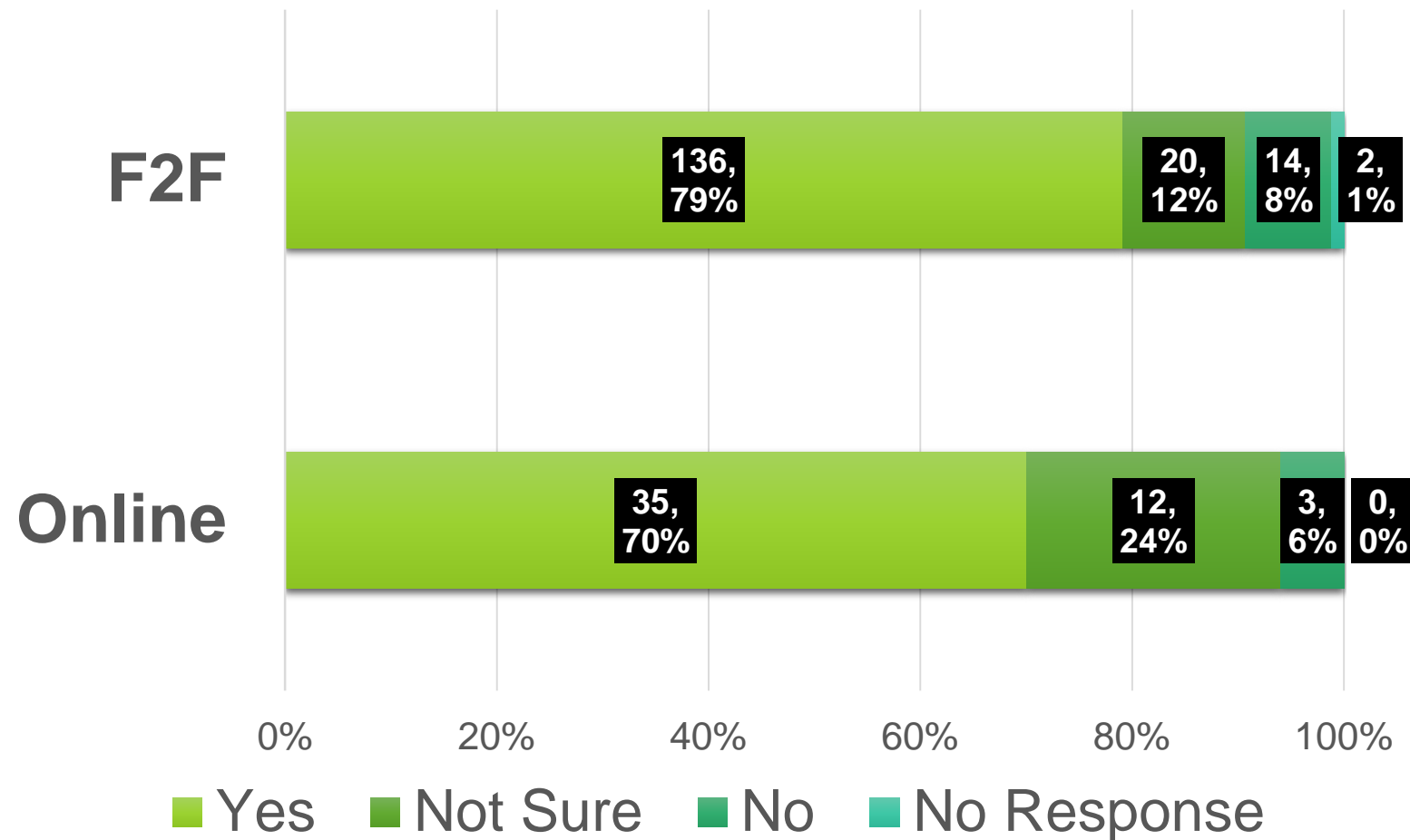
### Time Spent Watching Videos



# Perceived Value

## Writing Data

I would recommend the writing skills presentation to a classmate *or* I would recommend the writing skills videos to a classmate.





# Confidence



## Writing Data

I can create a Reference List correctly in APA style.

