Assessment in Instruction: Identifying Disconnect

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https://tinyurl.com/y3bx9c68

Our process:

1. Students respond to short answer questionnaire.

2. Textual analysis of student responses.

3. Adapt assessment and instruction for next semester.

Student tasks:

1. Craft a research question
2. Brainstorm keywords
3. Create a search string with Boolean Operators
4. Choose Summon limiters
5. Identify an article
6. Create a citation

What are we really measuring?

ACRL Knowledge Practices and Dispositions

Knowledge Practices

- Determine an appropriate scope of investigation.
- Utilize Divergent (brainstorming) and convergent (selecting the best source) thinking when searching.
- Use different types of searching language (e.g., controlled vocabulary, keywords, natural language) appropriately.
- Match information needs and search strategies to appropriate search tools.
- Assess the fit between an information product's creation process and a particular information need

Dispositions

- Consider research as open-ended exploration.
- Realize that information sources vary greatly in content and format and have varying relevance and value.
- Maintain an open mind and a critical stance.
- Exhibit mental flexibility and creativity.

Research Questions

43% failure rate

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1. Too broad
2. Closed ended
3. Vague
4. Biased perspective/based on logical fallacy
5. Too narrow
6. Misunderstood question

Scope

What makes a question too broad?

Word choice implying "all"

E.g. "Since its introduction, how has artificial intelligence benefited society?"

Widespread impacts

E.g. "What is the impact of teenagers that drink?"

What makes a question too narrow?
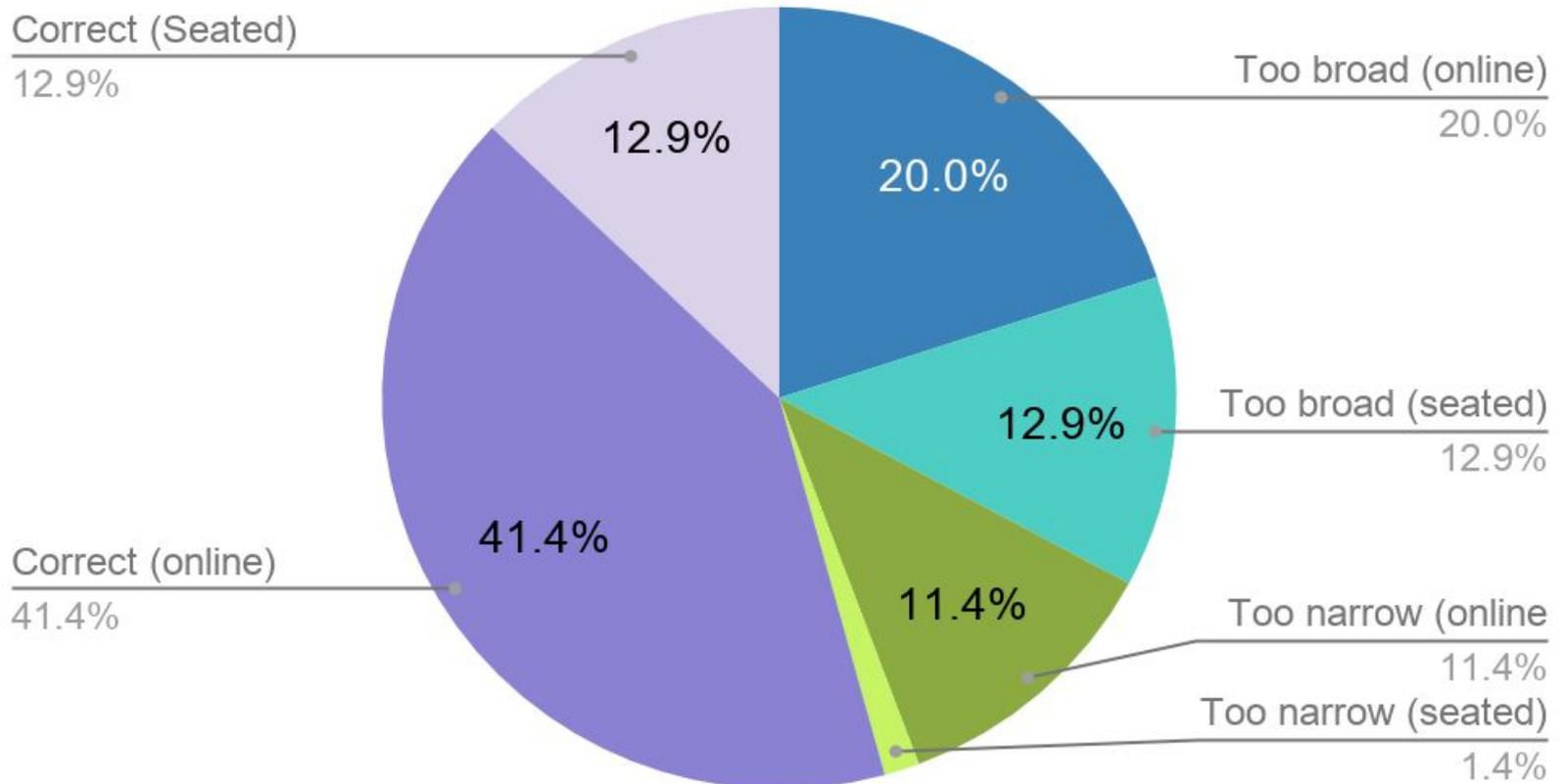
Too specific or idiosyncratic

E.g. "Why does my five year old like youtube make-up tutorials?"

A question that can be answered with a defined list

E.g. "What are some of the symptoms for keratoconus?"

Results from Analysis

Research Question: Scope

Correct (Seated)
12.9%

Too broad (online)
20.0%

12.9%

20.0%

Too broad (seated)
12.9%

12.9%

Correct (online)
41.4%

41.4%

11.4%

Too narrow (online
11.4%

Too narrow (seated)
1.4%

Argumentative

Objective

Question can be answered through reporting of facts

E.g. "What are the effects of prolonged steroids on the human body?"

Predetermined conclusion

E.g. "What is Liverpool Football Club?"

Subjective

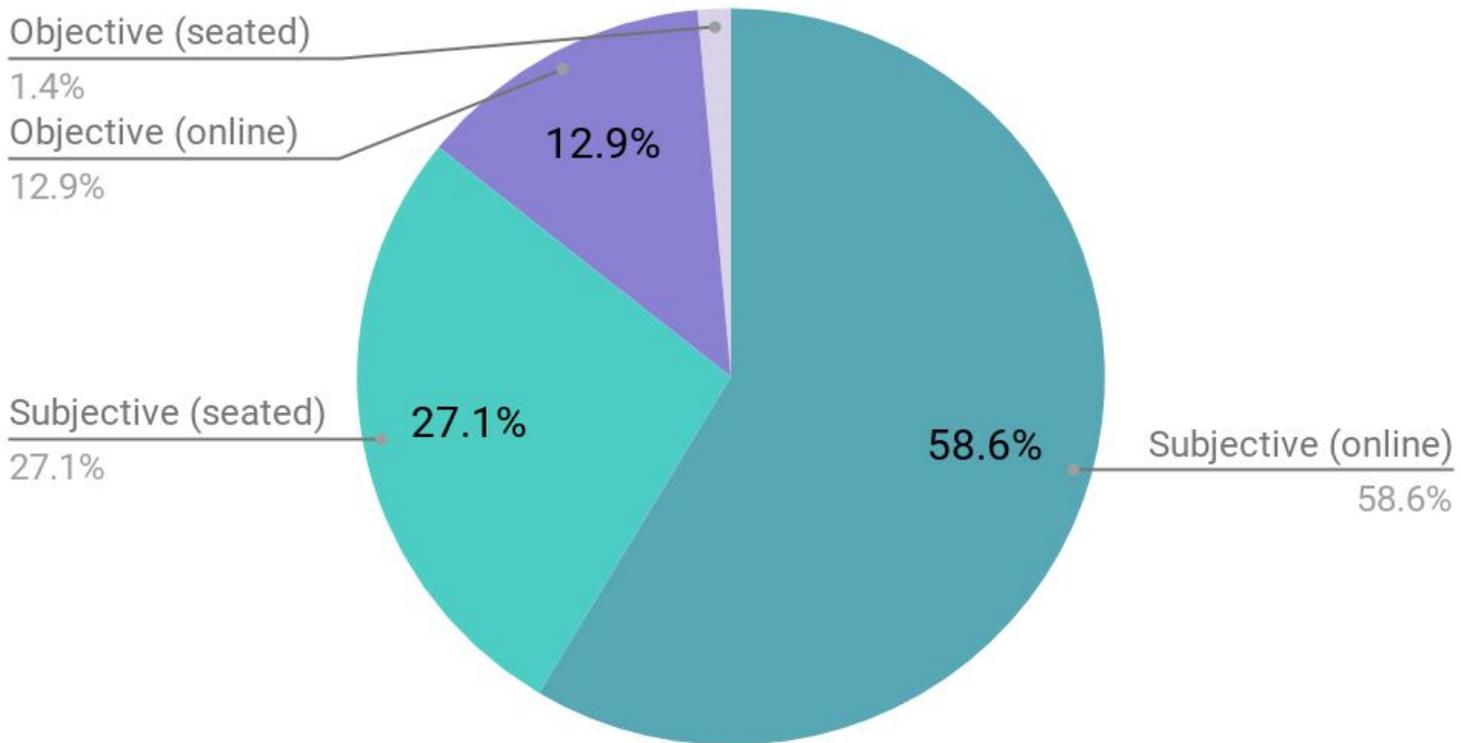**Question can be answered through analysis**

E.g. "Do adults with ADD handle it better if treated as children first?"

Different conclusions can be made based off how the information is assessed

E.g. "What is the cause of the minimal number of participation of women in blue collar fields?"

Results from Analysis

Research Question: Argument

- Objective (seated) 1.4%
- Objective (online) 12.9%
- Subjective (seated) 27.1%
- Subjective (online) 58.6%

12.9%

27.1%

58.6%

Discussion/Solutions

Keyword Choice

91% failure rate

1. Failure of Divergent Thought
2. Failure to develop multiple keywords
3. Repetition of terms
4. Non-scholarly/significant natural language
5. Left out main concept
6. Stop words

Keyword Choice & Knowledge Practices

Divergent Thought

Multiple search terms for each main concept

No repetition of concepts

Searching Language

No (or little) "natural language"

Avoid using stop words

No phrases as search terms

Match Information Needs

Search terms actually relate to main concepts of topic

Each concept has at least one search term

Some examples

Divergent Thought

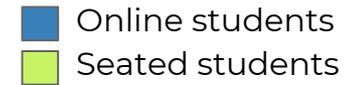School lunches, all students, free

Searching Language

Teenager prefer to be online rather than go out and actually talk to people, they lack of social skills. They start isolating themselves from there family ; Teens will post all their information online trusting online people, the teens can be in danger meeting strangers,or being hacked and have information stolen.
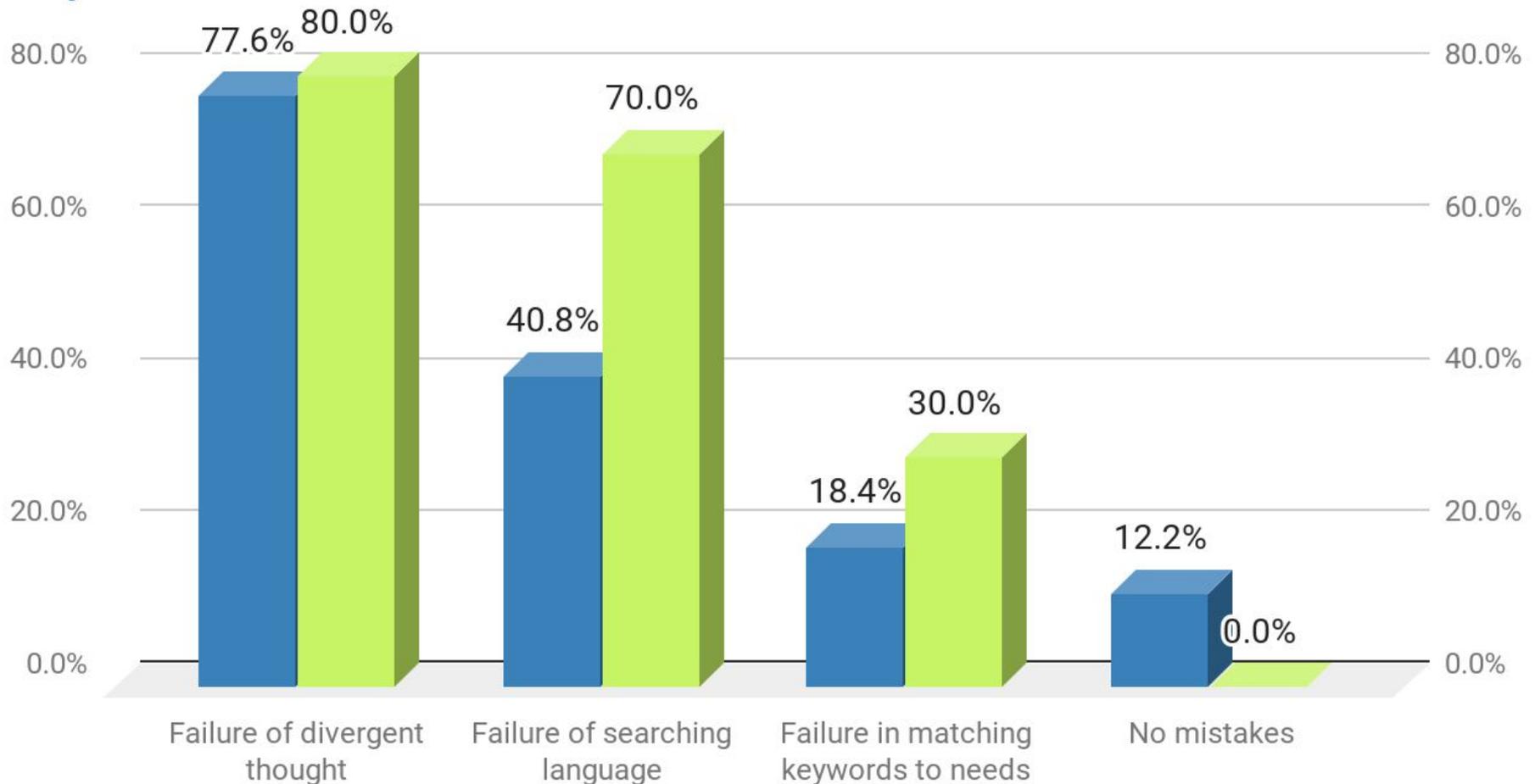
Match Information Needs

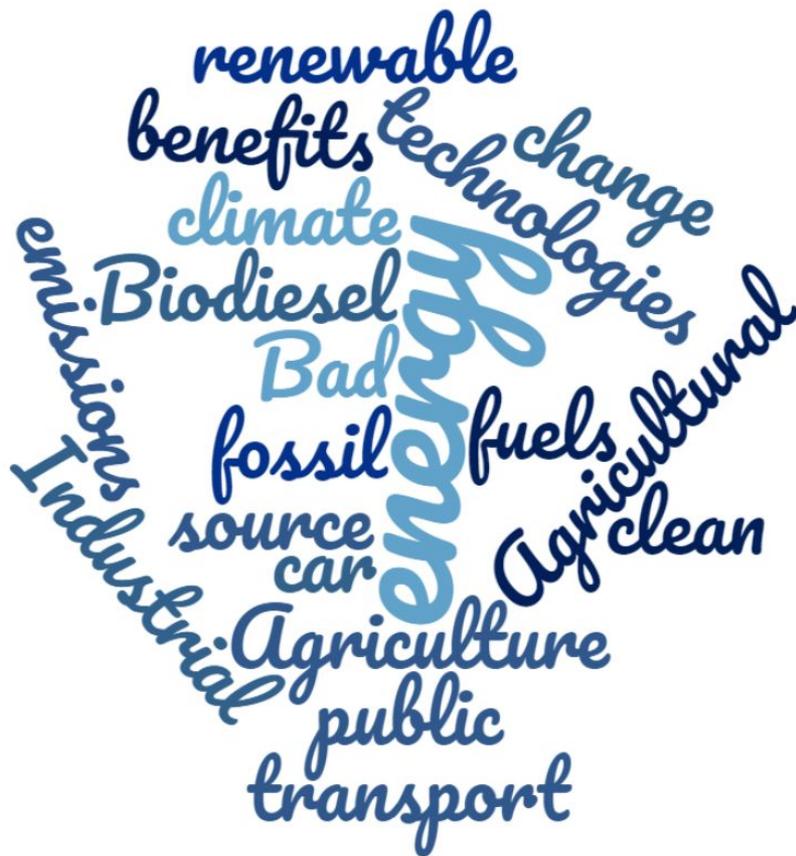compensation / salary, ineligible / punished

Students' keywords

renewable benefits technologies change climate emissions Biodiesel energy Bad fossil fuels Agricultural Industrial source car Agriculture clean public transport

Research topics included:

- Climate Change
- Alternative energy

Librarian keywords

Come up with keywords for the same subjects!

- Climate Change
- Alternative energy

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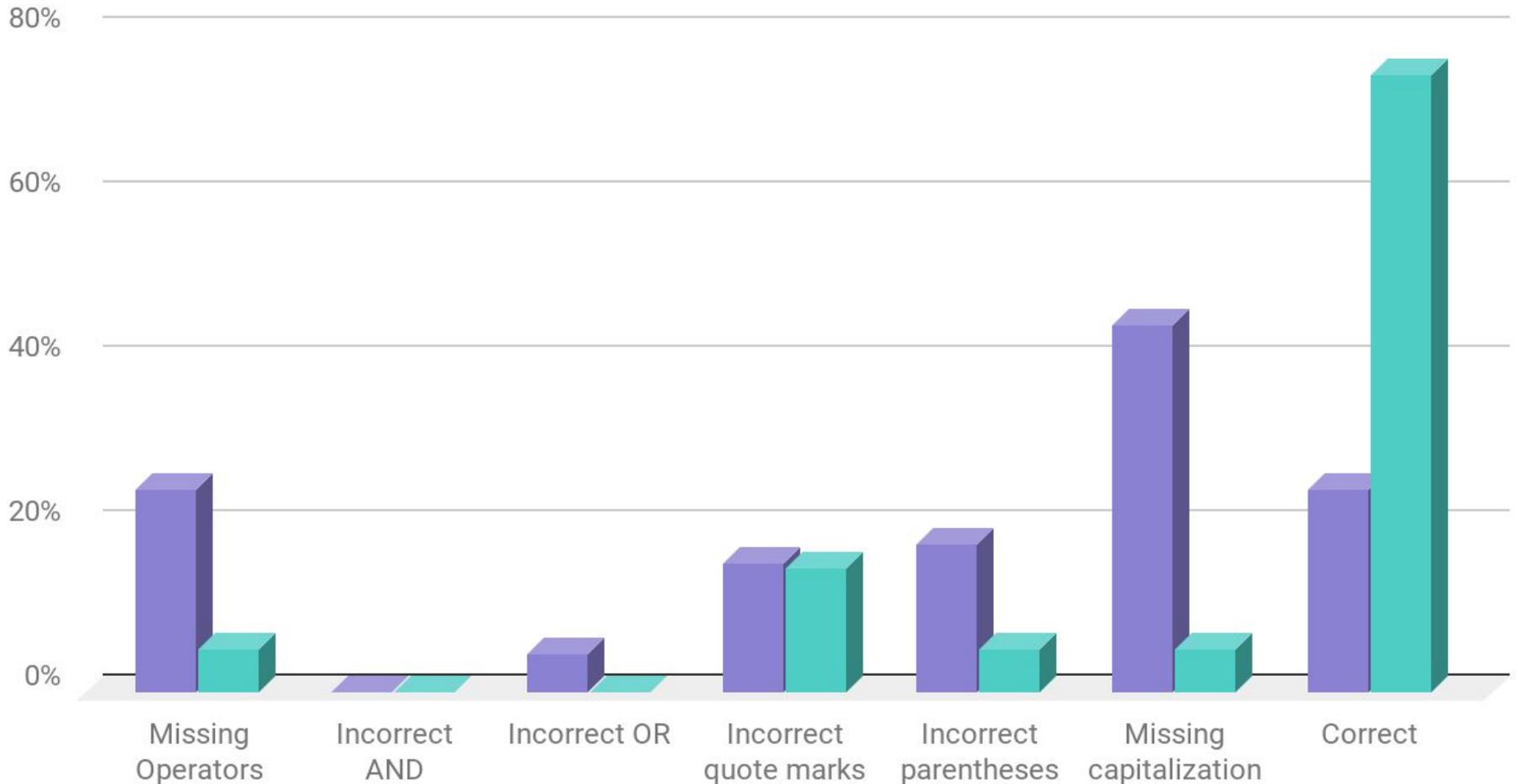
Boolean Operators

60% failure rate

1. Incorrect capitalization
2. Missing operators
3. Incorrect quote marks
4. Incorrect parentheses
5. Incorrect use of OR

Results from Analysis:

Boolean Operators

Legend:
- Online students
- Seated students

Chart data (approximate percentages):

Category	Online students	Seated students
Missing Operators	~22%	~5%
Incorrect AND	~0%	~0%
Incorrect OR	~4%	~0%
Incorrect quote marks	~13%	~13%
Incorrect parentheses	~15%	~5%
Missing capitalization	~42%	~5%
Correct	~22%	~72%

Y-axis: 0%, 20%, 40%, 60%, 80%

Some examples:

Missing Operators

- Tattoos, workplace, attitudes, and history

Incorrect OR

- (Cooking) Healthy OR veggies OR greens Or Proteins OR fats

Incorrect Quote Marks (type 1)

- "Tuition" AND "Financial Aid"

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Some more examples:

Incorrect Quote Marks (type 2)

- ▪ "Teenagers and texting while driving"

Incorrect Parentheses

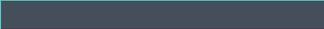- ▪ Games "Waste" News (useful) Social (distracting)

Lack of Capitalization

- ▪ "health risks" "vegan" or "meat consumption"

Does this even matter?

Content Types

34% failure rate

1. Journal Article
2. News Article
3. Book
4. Website
5. Other

Content Type

"Correct" Types

Journal Articles

Books

Other: White Paper, Conference proceedings, Data Sources (i.e. Uniformation Crime Statistics)
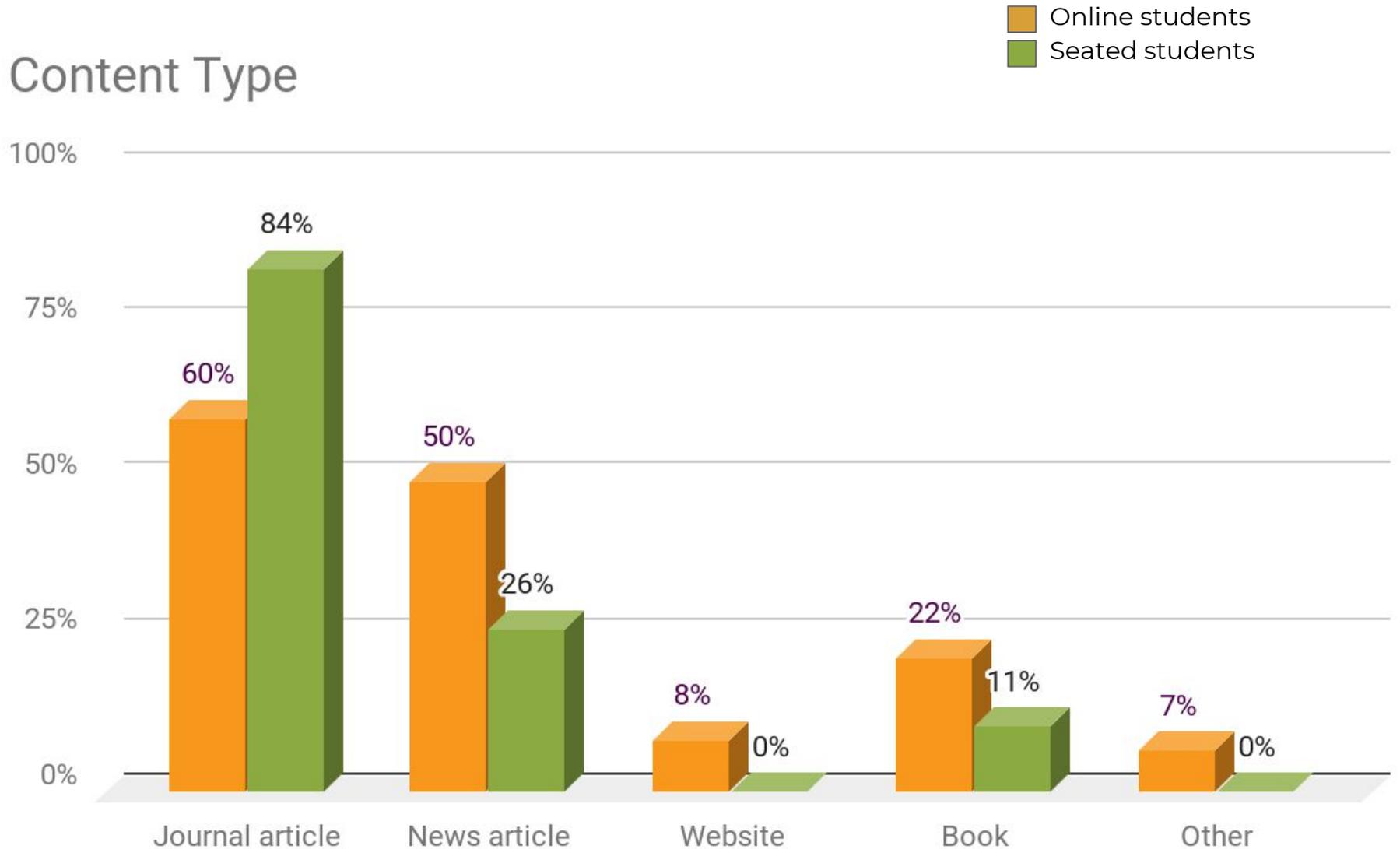
"Incorrect" Types

News Articles

Websites

Other: Blogs, Interviews, CQ Researcher or similar non-scholarly source

Students choosing peer review

26.67%
Online

84.21%
Seated

Results from Analysis:

Content Type

Legend: Online students (orange), Seated students (green)

Content Type	Online students	Seated students
Journal article	60%	84%
News article	50%	26%
Website	8%	0%
Book	22%	11%
Other	7%	0%

What are your areas of disconnect?

Thanks!

Any questions?

Find us at
soconnor@cccc.edu or
gsharrar@cccc.edu

Credits

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- Presentation template by SlidesCarnival
- Photographs by Unsplash

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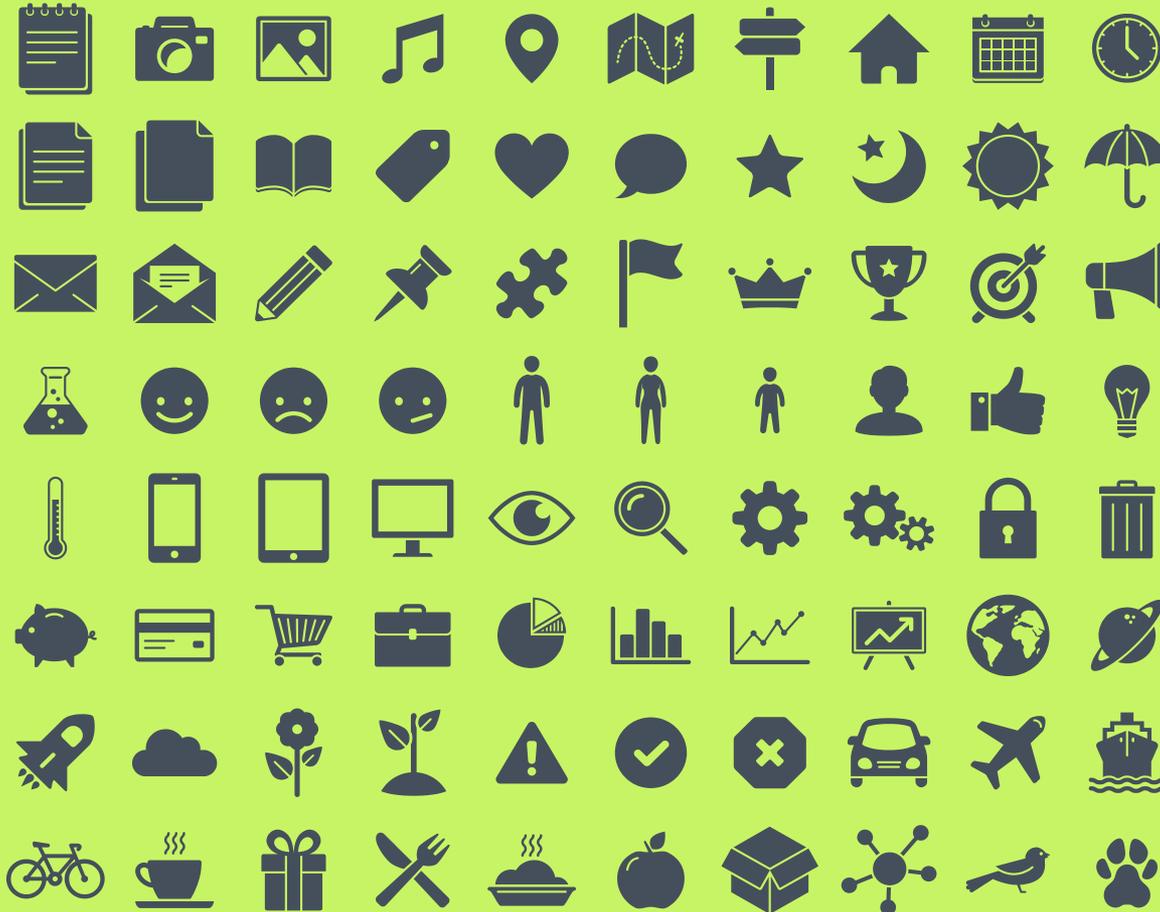- ▣ Titles & Body copy: **Montserrat**

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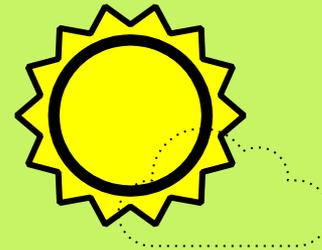
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Now you can use any emoji as an icon!
And of course it resizes without losing quality and you can change the color.

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and many more...