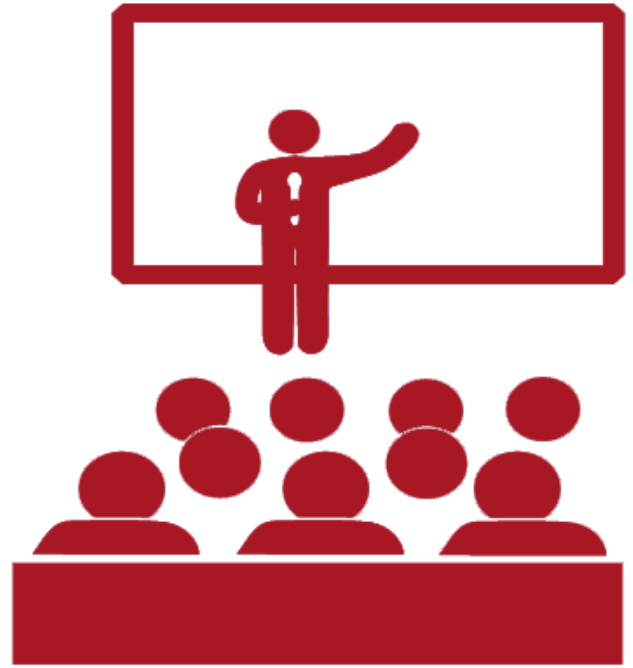
Carnegie Mellon University
Global Communication Center



Delivering Effective Presentations

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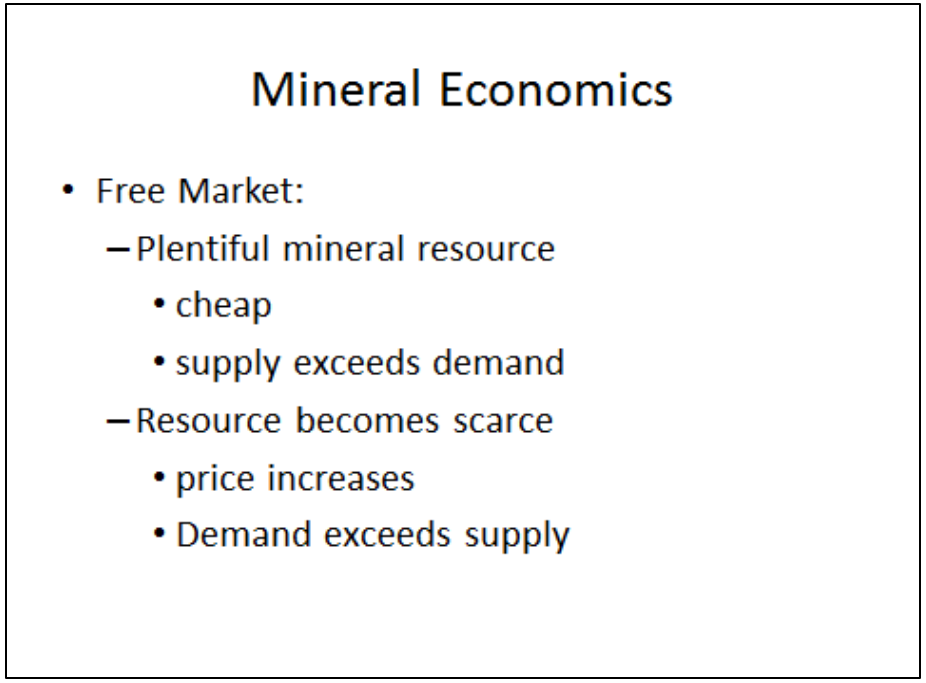
Director, Global Communication Center

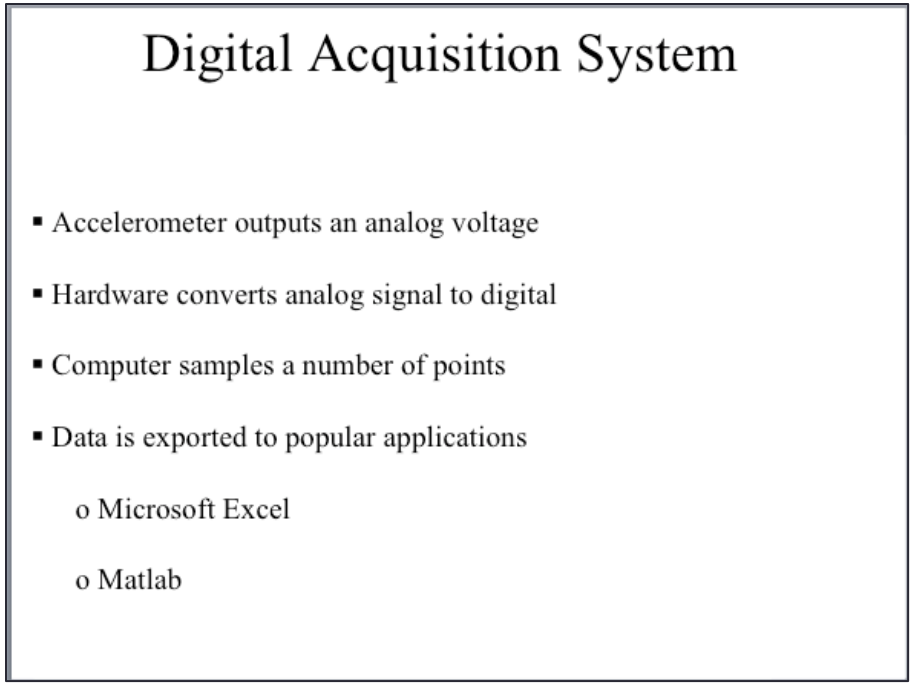
This presentation is meant to follow the “Designing Effective Slide Presentations” video

https://tinyurl.com/assertionevidence

https://youtu.be/kbdO7adBRFE?si=T_fC0op36AeBhpsZ

PowerPoint's default designs wrongly push users to phrase headings and bulleted lists

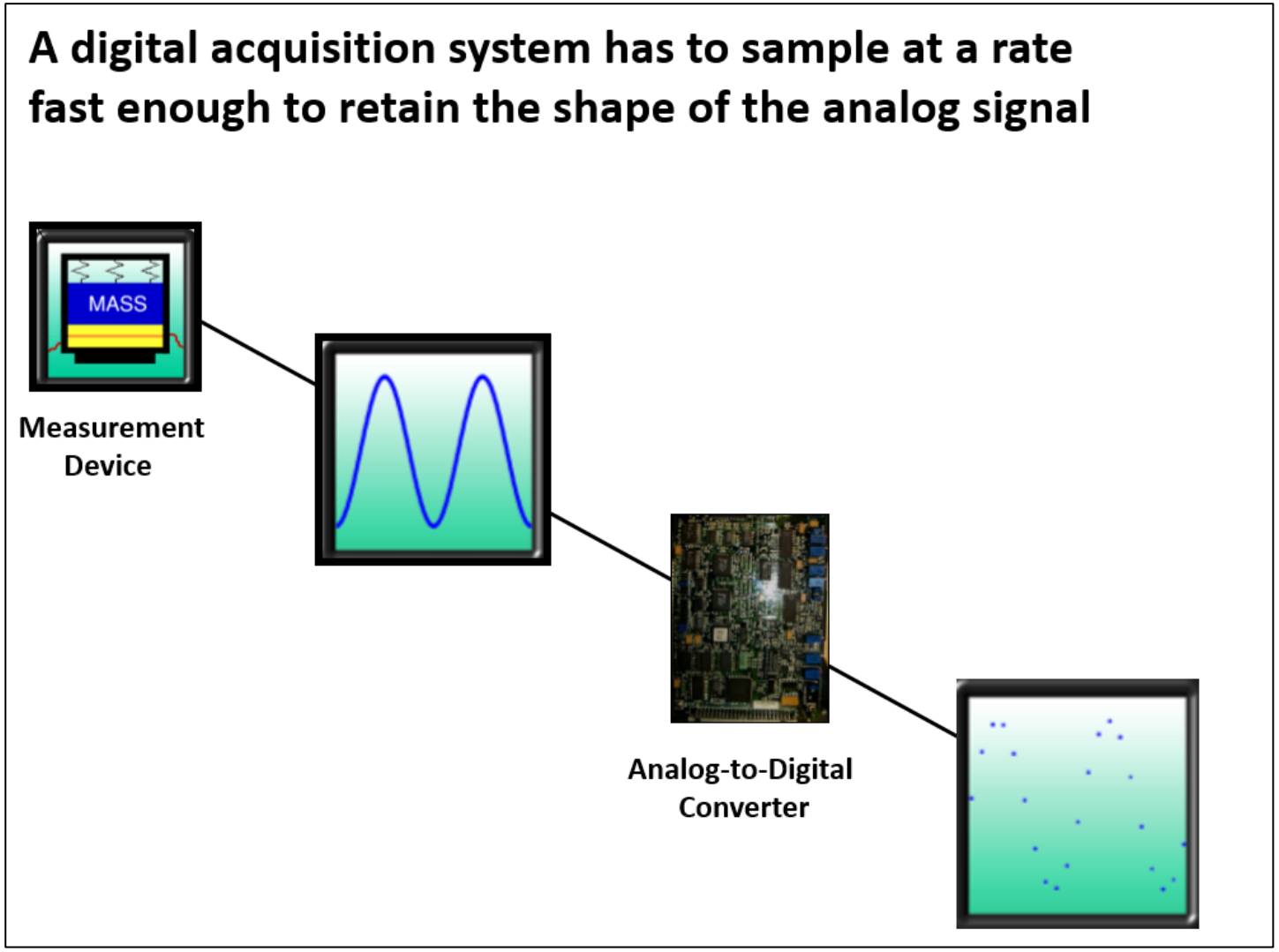




In place of this default, we advocate a new model of slide design backed by research:

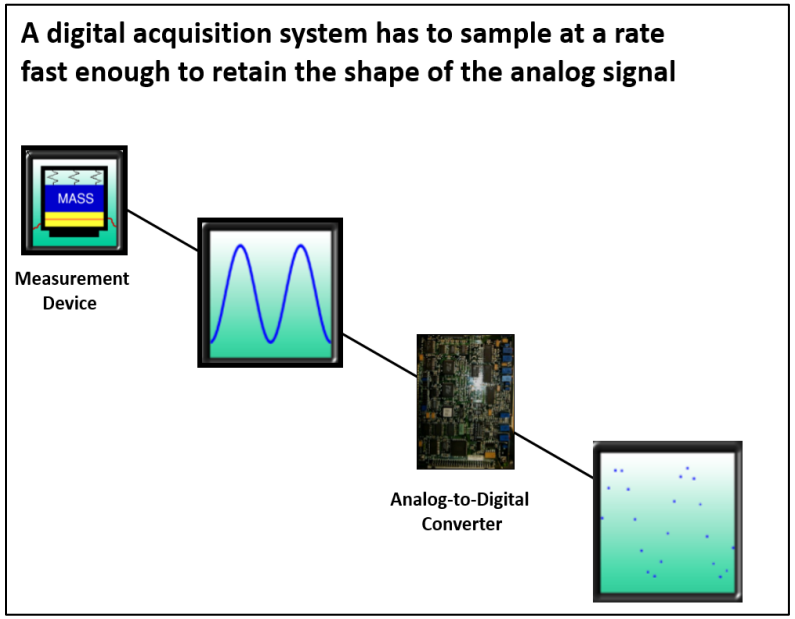
The Assertion-Evidence Model

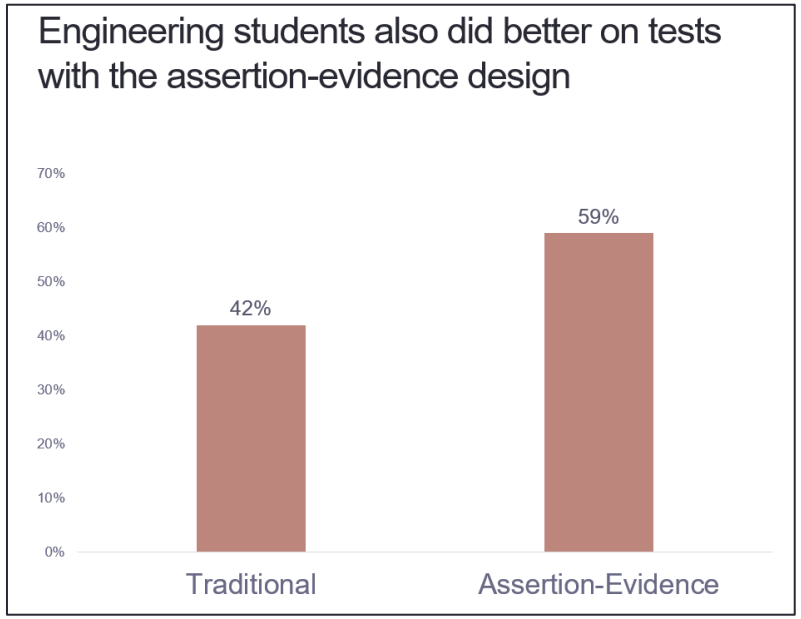
The assertion-evidence model combines complete sentence headings and visual evidence



An ideal sentence heading is two lines long, left aligned, and sentence case (first letter only capitalized).

We use sentence headings with both topical and data-driven slides



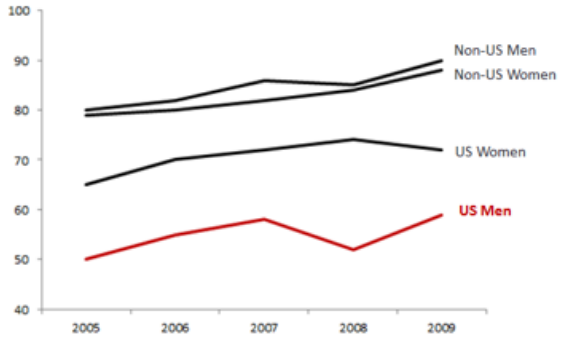


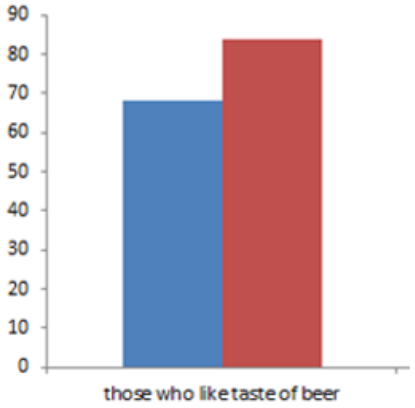
Sometimes it is hard to think of a visual for a topic-driven slide

In this case, consider using just a single sentence rather than a “decorative” visual

But data-driven slides should always have a visual and a main sentence assertion

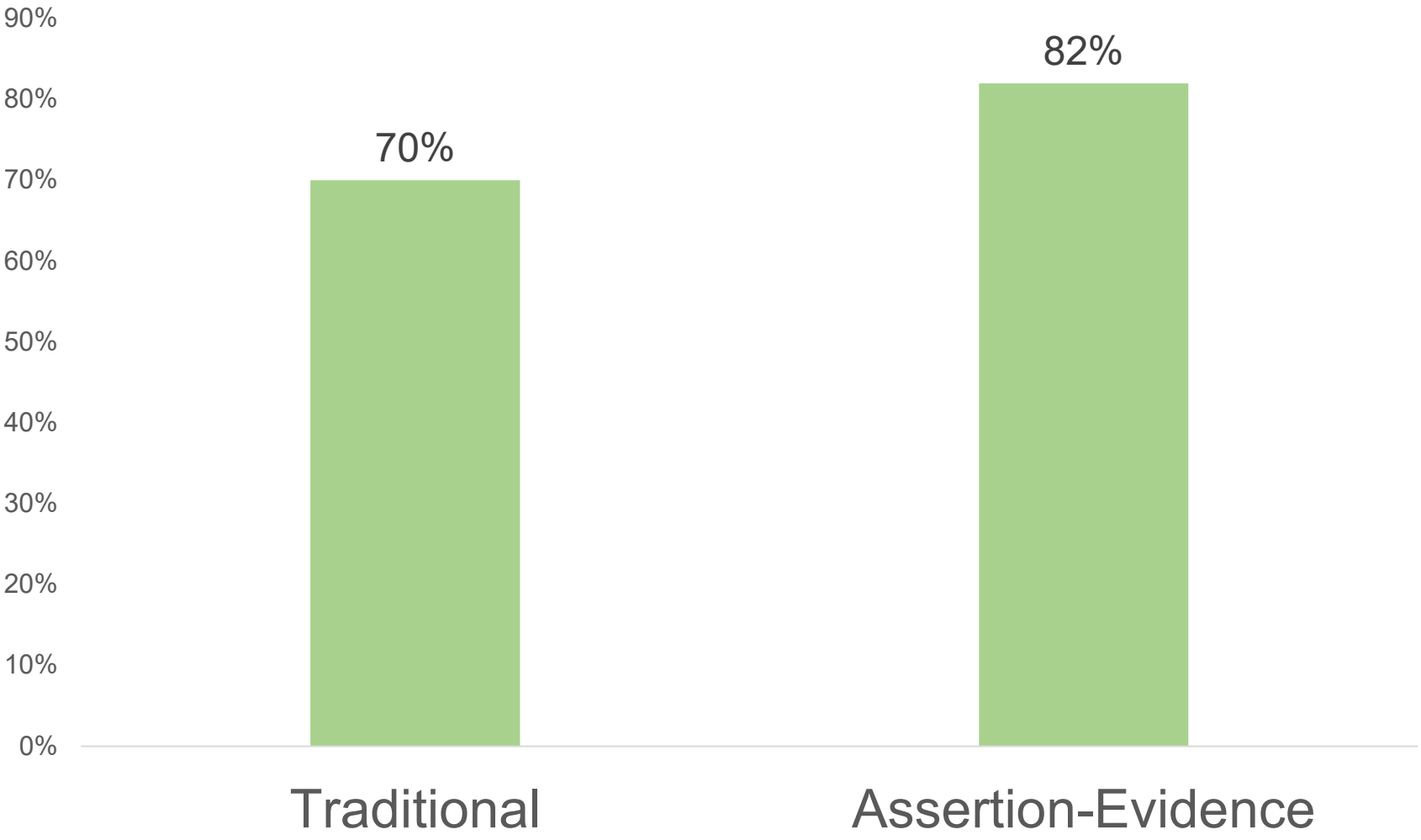
State	Homicide Rate per 100,000
Maine	1.8
New Hampshire	2.2
Rhode Island	2.8
Connecticut	3.9
Colorado	4.7
New York	6.3
Florida	7.7
Georgia	8.7
California	8.8
Arizona	9.0



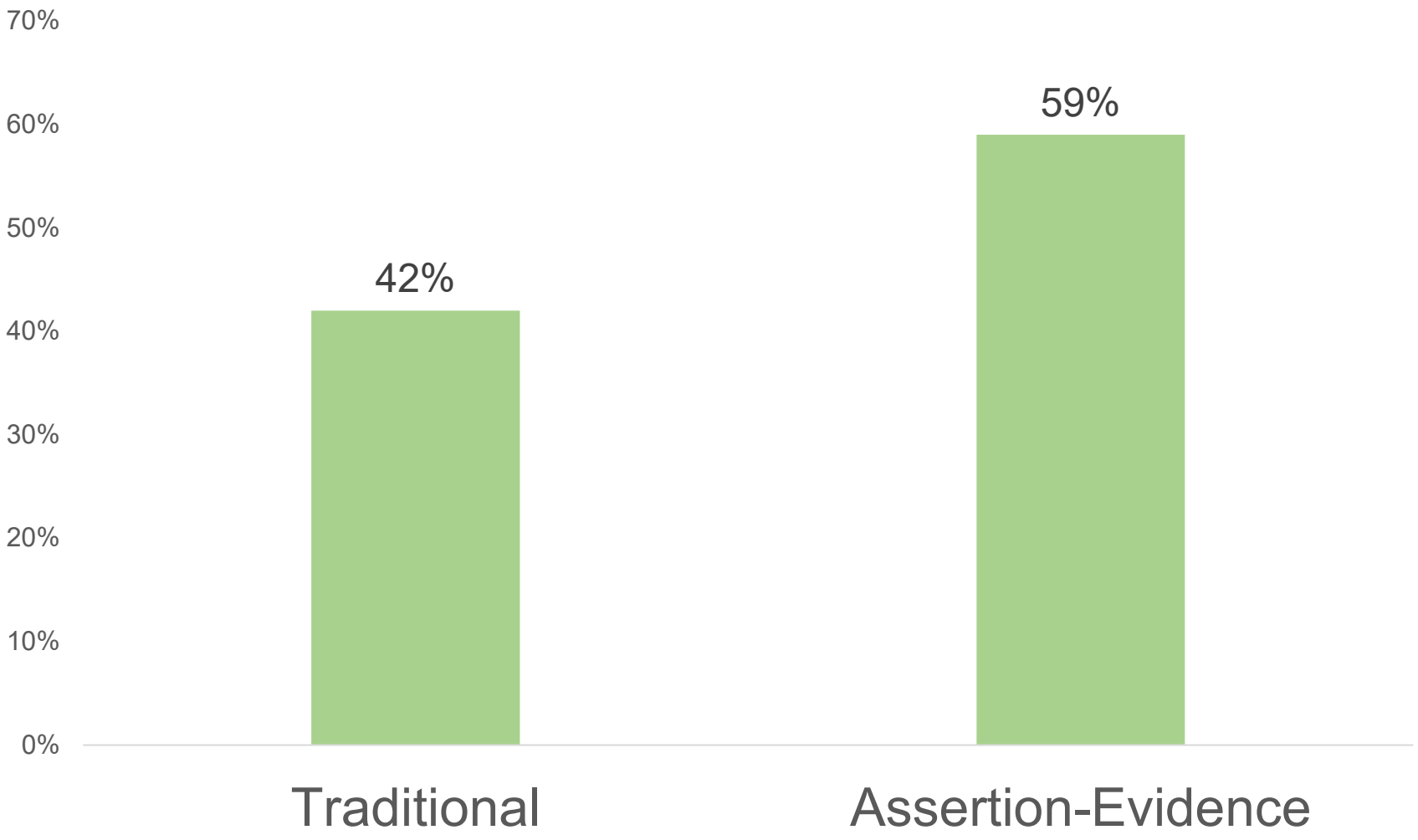


The following slides use the assertion-evidence model to summarize research on its effectiveness

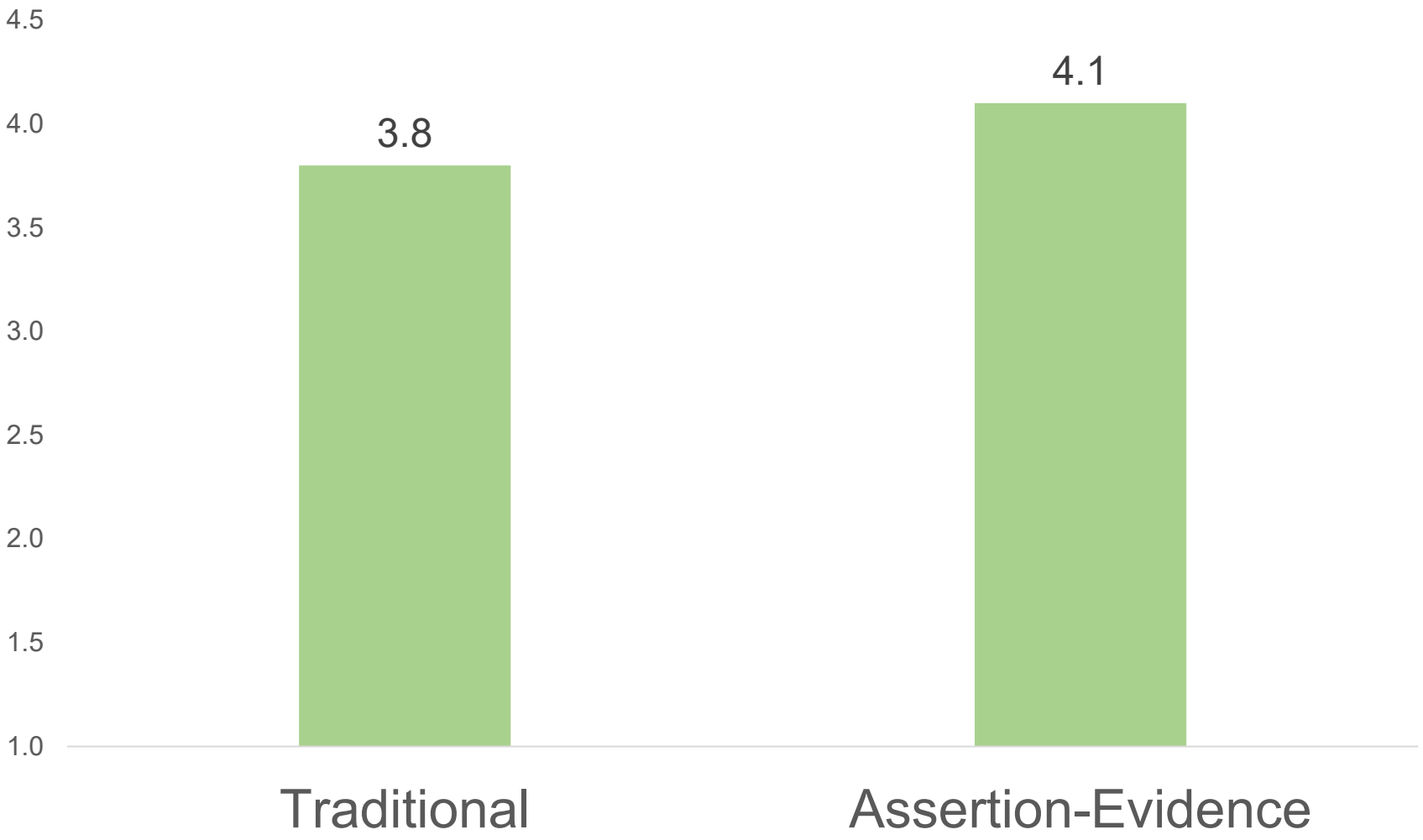
Students in a geological sciences class did better on tests with the assertion-evidence design



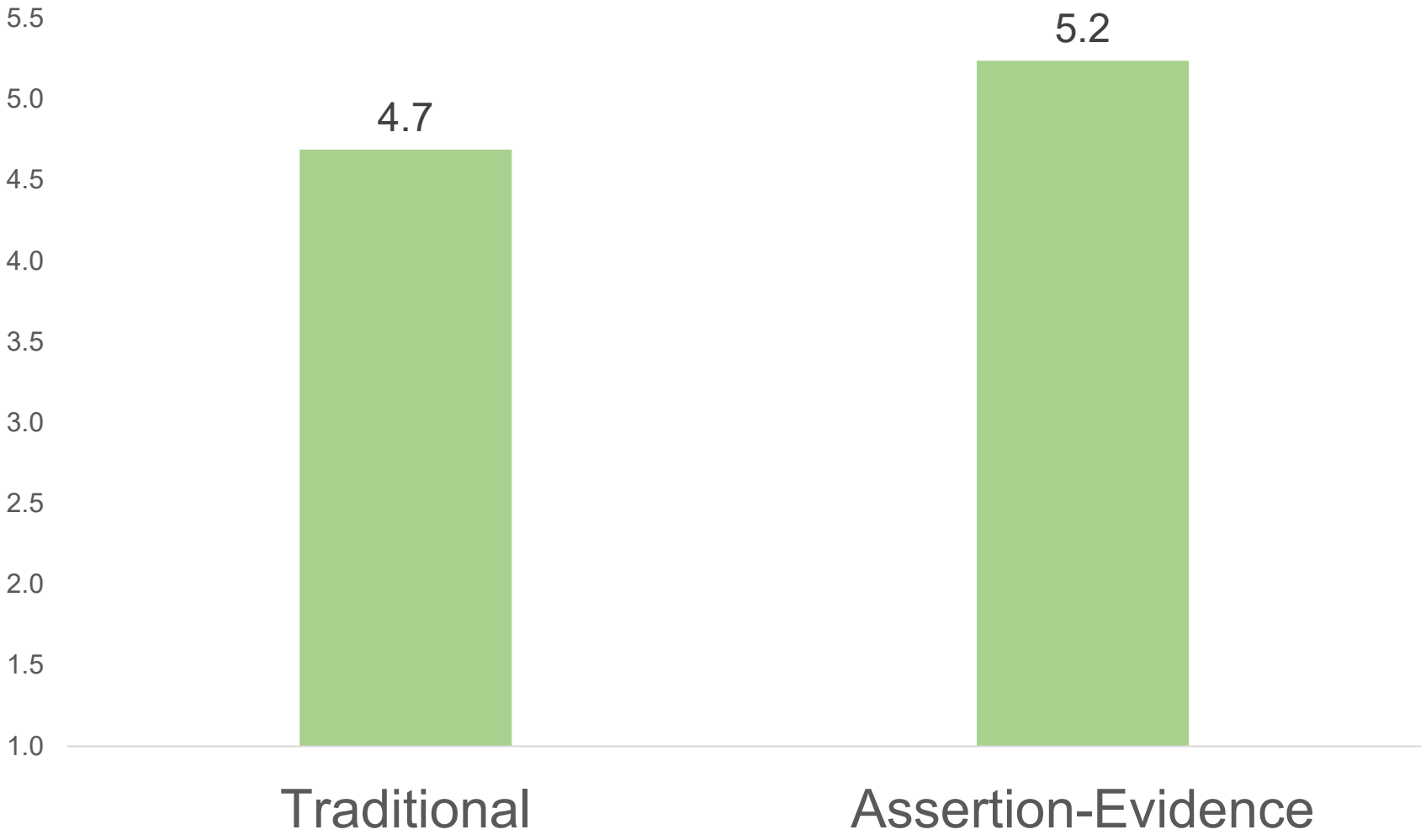
Engineering students also did better on tests with the assertion-evidence design



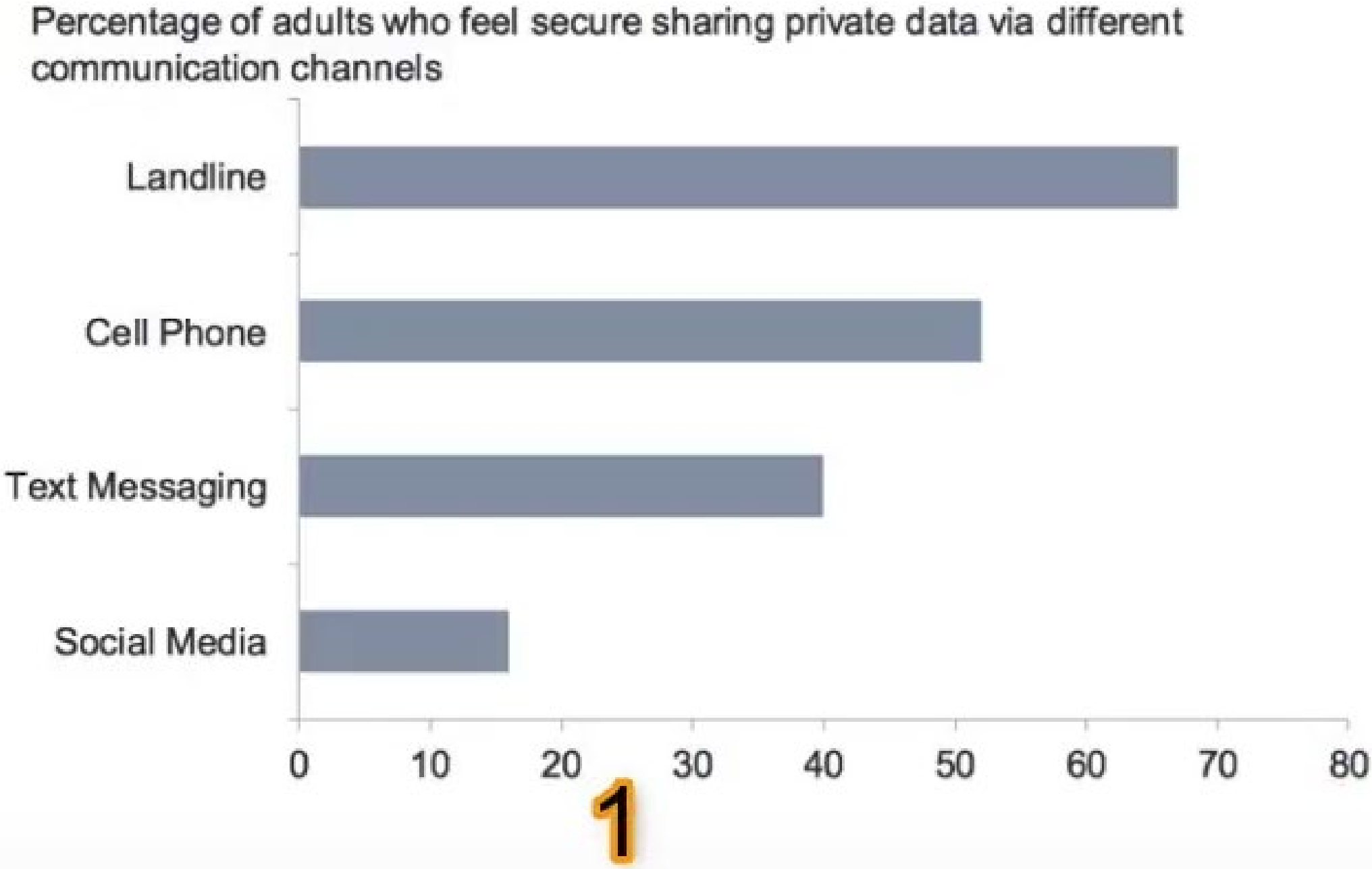
Engineering students who created assertion-evidence slides received higher analysis scores (6 pt scale)



CMU grad students using assertion-evidence gave more highly rated conference presentations (6 pt scale)

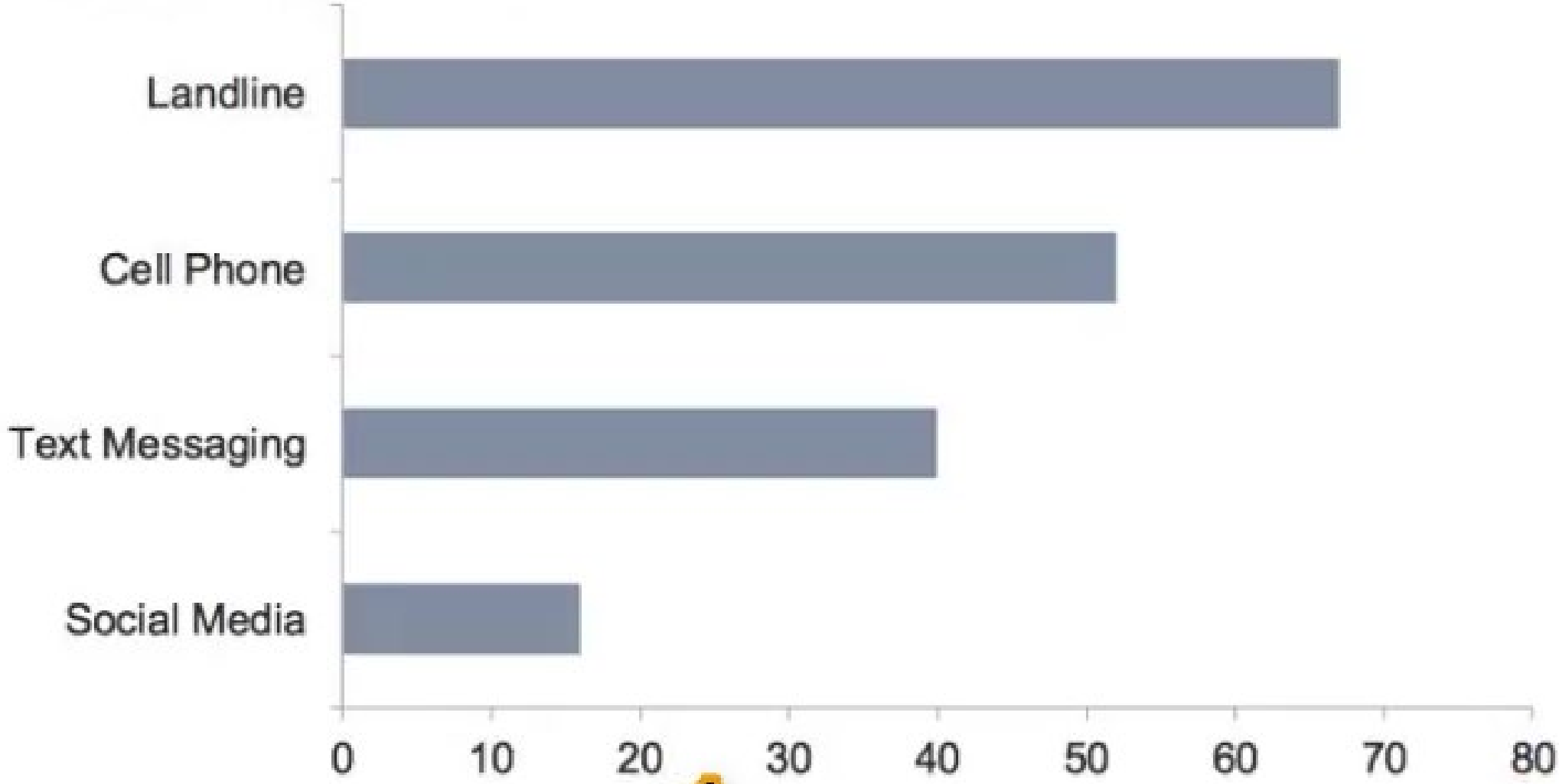


Exercise A


Percentage of adults who feel secure sharing private data via different communication channels
Landline
Cell Phone
Text Messaging
Social Media
0
10
20
30
40
50
60
70
80

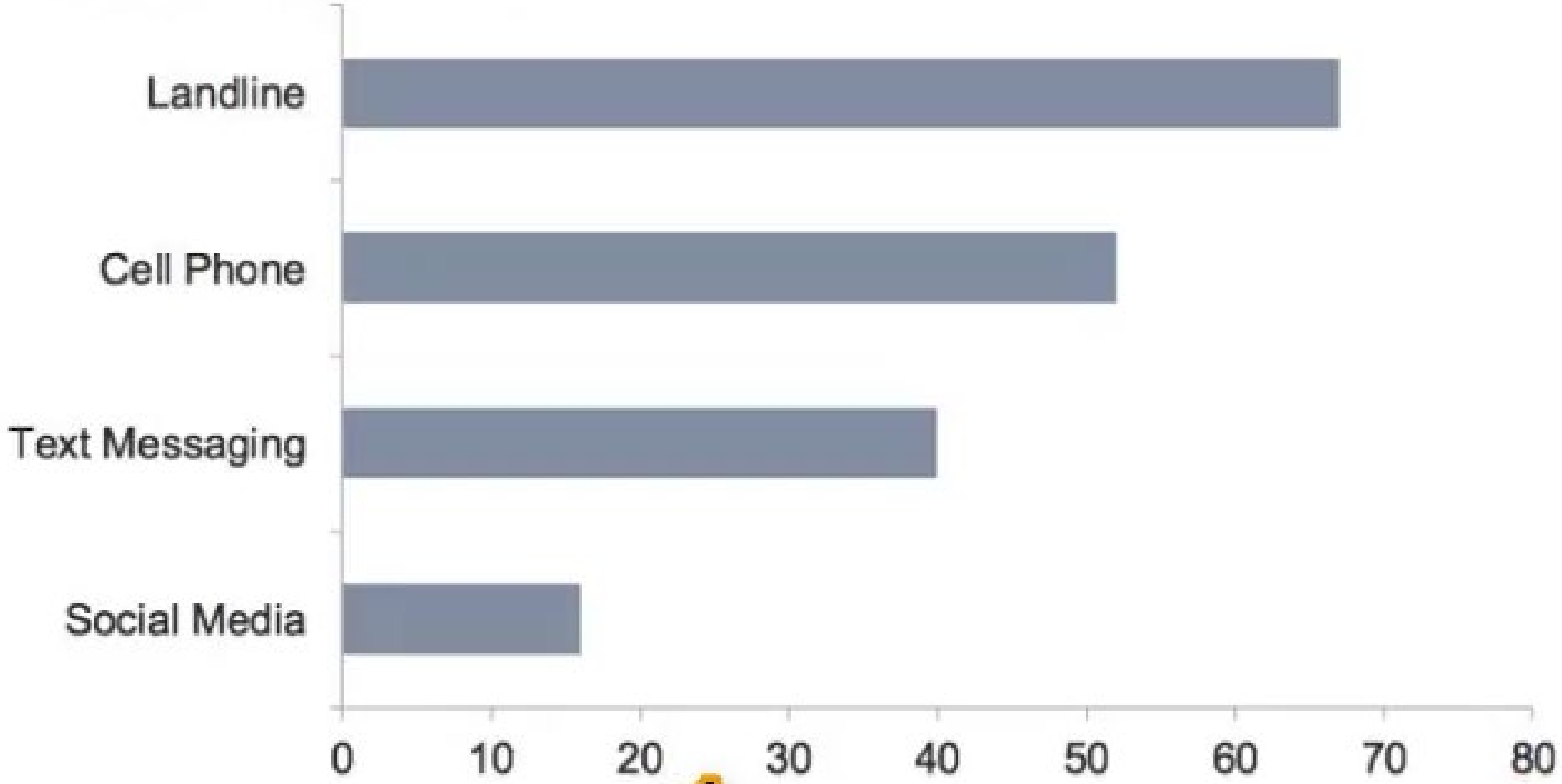
1

Adults feel most secure sharing private data on landline phones and least secure on social media



1

Adults feel most secure sharing data on older technologies



1

Accuracy and run time of two different spam filters

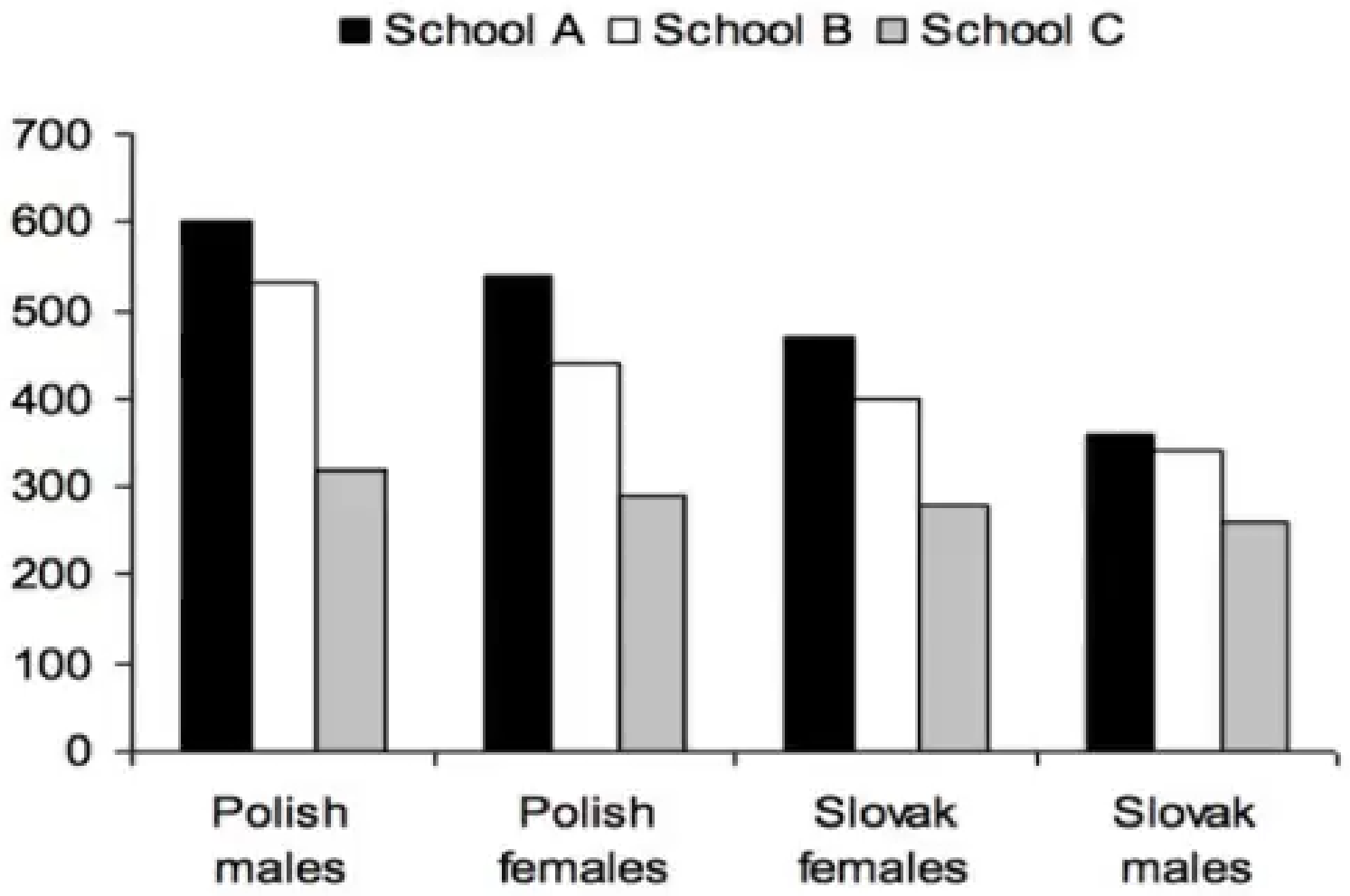
Name	Correctly Filtered	Run Time
Filter A	91%	141s
Filter B	84%	111s

2

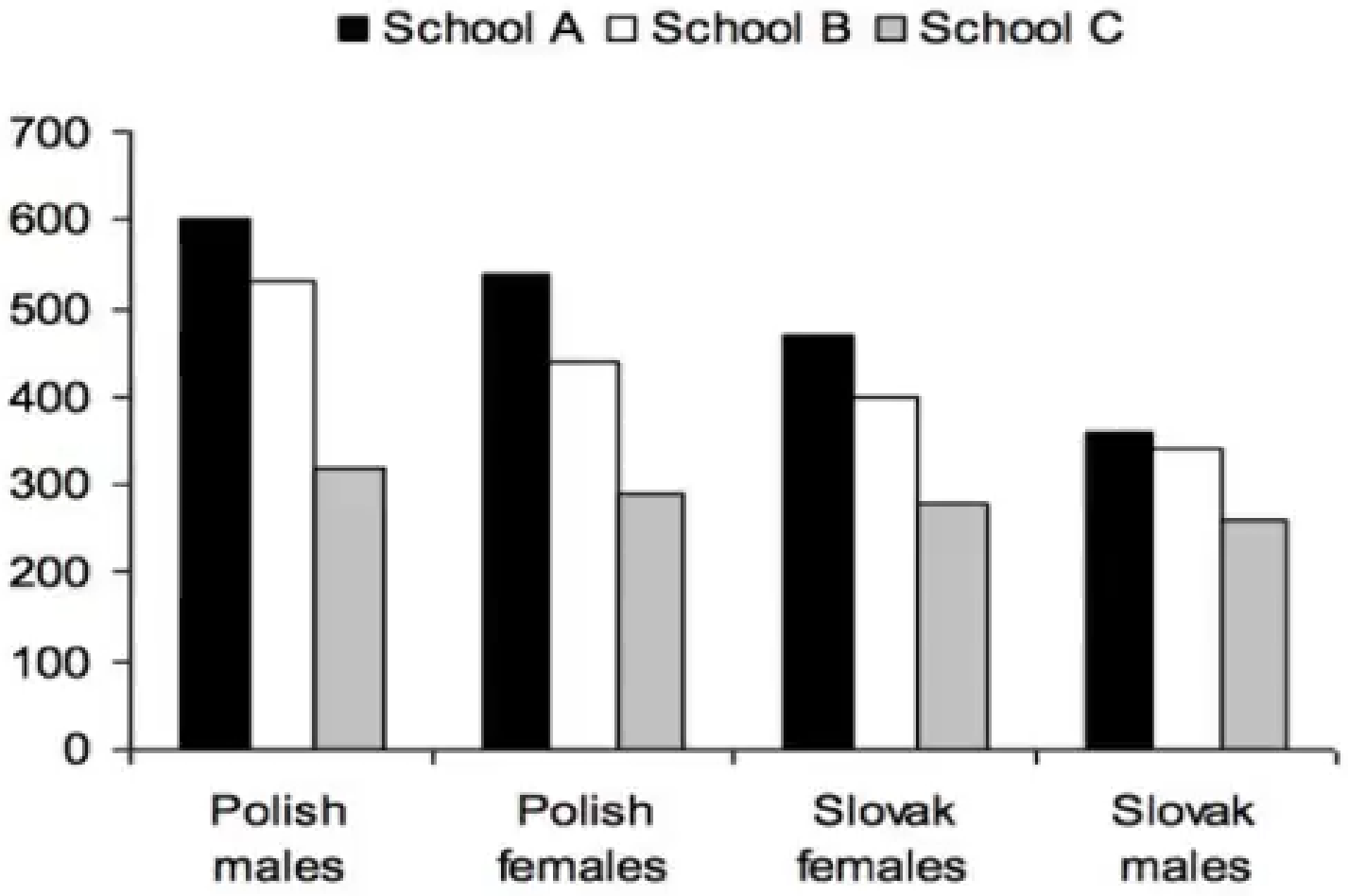
Filter A is more accurate, but slightly slower, than Filter B

Name	Correctly Filtered	Run Time
Filter A	91%	141s
Filter B	84%	111s

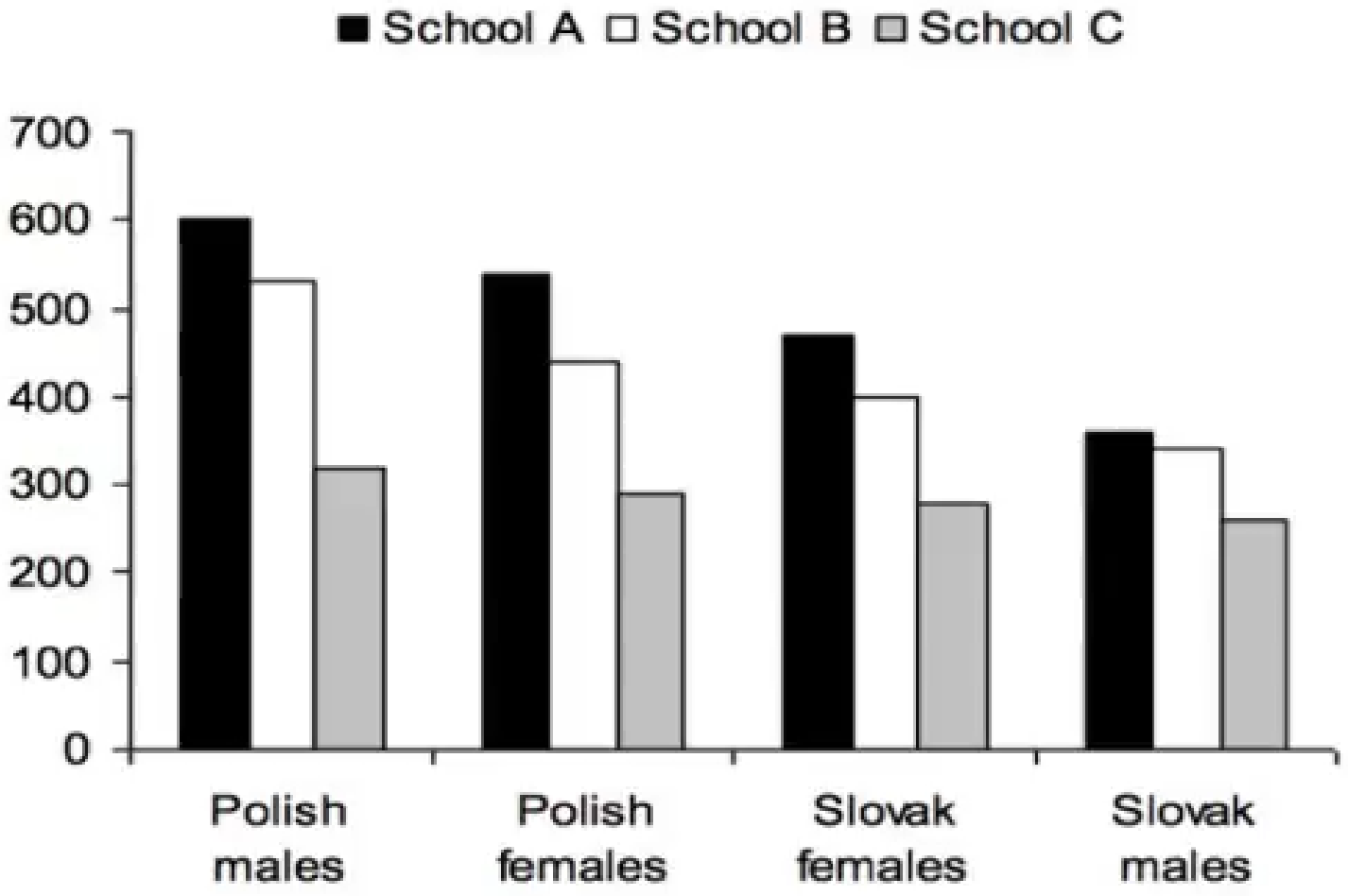
Student test scores by race, gender, and school



Polish males had higher test scores than other groups

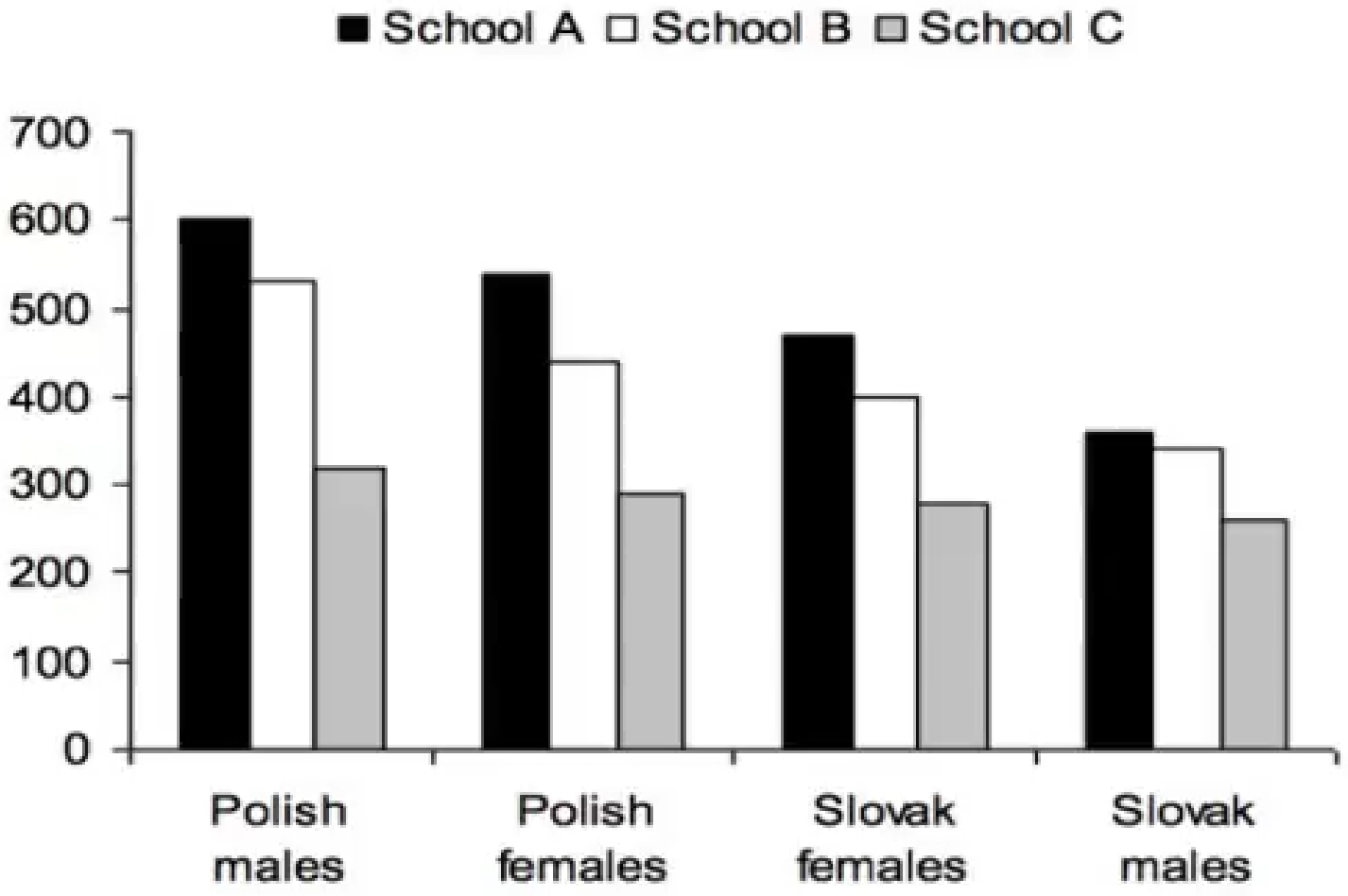


Polish students outperformed Slovak students at schools A and B



3

Students at school C did the worst on tests regardless of gender or ethnicity



Exercise B

Results

Table 1: Results of Fog Warning System Implementation

Implementation	***Before***	***After***
Average vehicle speed	45.5 mph	45.7 mph
Standard deviations in vehicle speed	9.4 mph	7.2 mph

The fog warning system produced safer road conditions by decreasing speed deviations

Implementation	***Before***	***After***
Average vehicle speed (in mph)	45.5	45.7
Standard deviations in vehicle speed (in mph)	9.4	**7.2**

How to optimize workplace efficiency

- Working in time blocks maximizes efficiency
  - Most individual activities can be completed in 50 min or less
  - Most individual meetings can be conducted in 20 min.
- Schedule breaks between time blocks
  - A ratio of 50 minutes working to 10 minutes break is shown to be the most conducive to productivity
- Plan to reflect on tasks after 3 blocks of time
  - Reflect on how you feel about your progress
  - Re-read notes
  - Plan to improve next time
- Alternate sitting with walking and standing
  - For every 20 minutes you spend sitting, you should spend 8 minutes standing and 2 in motion

To work efficiently, break your time up into blocks

Time blocks maximize efficiency

Individual activities take 50 min or less

Individual meetings take 20 min.

Schedule breaks between time blocks

Every hour, work 50 minutes and take a break for 10

Alternate sitting with walking (sit 20 min., stand 8, be in motion 2)

Reflect after three blocks

Reflect how you feel about your progress

Re-read notes

Make an improvement plan

To work efficiently, break your time up into blocks

Chunk your time into **blocks**
(e.g., 50 min 20 min)

→

Schedule breaks between time **blocks**

→

Reflect after three **blocks**

Planning your time into blocks can optimize efficiency

50 min work

10 min break

Reflect after three blocks of time

Alternate sitting with walking and standing

20 min 8 min 2 min

Formal vs. Informal Email

- Formal
  - Audience
    - People outside company
    - Superiors
  - Word choice
    - “Dear”, “Sincerely:

- Informal
  - Audience
    - People inside company at similar level
  - Word choice
    - Formal greeting not necessary
    - Short

Match the tone and word choice of your email to your audience

Audience:

People outside company or superiors

Tone:
Formal

Word choice:
“Dear,” “Sincerely”

OR

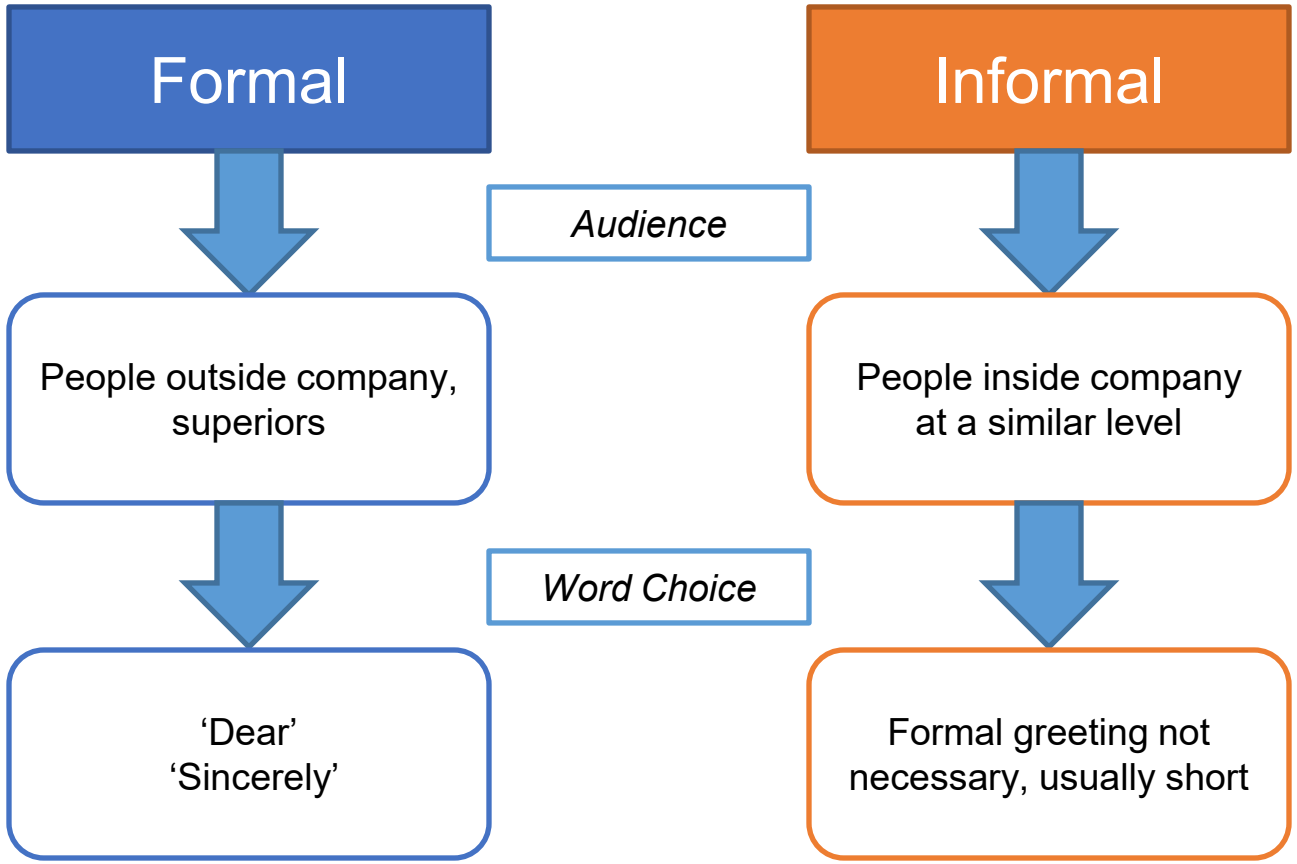
Audience:

People inside company at similar level

Tone:
Informal

Word choice:
Short greeting (optional)

The distinction between formal and informal email is important for new employees to grasp



Additional Resources

Video (and exercises) on the Assertion-Evidence model: https://tinyurl.com/assertionevidence

More videos, learning modules, and research publications from the former Global Communication Center: https://sites.google.com/andrew.cmu.edu/gcc/home

References

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