**Talking with Slides**
A Cautionary Tale

Slides have become a staple for the majority of public presentations. However, slides can become a source of distraction that can affect the content people will retain. If we are to deliver exceptional presentations, we must discover what pieces of a presentation our audience will remember. How can we effectively use slides to enhance our presentations, instead of worsening them? Answering this question will enable us to create a framework that will help optimize presentations.

In order to understand the information audience members take away from a presentation, we must first test what information they currently remember. Next, we must analyze how people transition their focus to and from the slides and speaker. Finally, we can study how information from presentations is stored in the brain.

My presentation has identified the information that audience members retain from a presentation. I designed an experiment to identify if audience members would focus on the slides or my voice when they listen to presentations. Spelke has shown us that language processors can get jammed if there are multiple sources of language information. In this situation, audience members are receiving multiple sources of language, namely from the slides and the speaker. The audience can only focus on one language source, so I wanted to determine which language source they chose to focus on.

Using a pilot study with 10 college students, I made two groups of 5 students. I then made a presentation about Django, a python web framework, which is a topic unfamiliar to the participants. For Group A, I put 50% of the content on the slides while presenting the other 50% of the content vocally. For Group B, I took the slide content from Group A and presented it vocally, while the other 50% was presented via the slides.  Both groups received the same content in the presentation, but I flipped in the mediums in which they received it. The subjects, on average, answered 7.4 questions from the slides correctly, and only 4.3 questions from the verbal piece of the presentation. This data is significant at the 1% level. This experiment illustrates that, when subjects were presented with differing content from the slides and the speaker, they chose to focus exclusively on the slide content.

I have confirmed Spelke's work that language processing does, indeed, get jammed when multiple language sources are present. Audience members cannot simultaneously process the slide and verbal content of a presentation. Additionally, this research has proven that verbal content is tuned out in the presence of slide content. Using this information, presenters should either present a very limited amount of content via the slides, or understand that people reading their slides will not pick up on what they are saying.

# Speaking with Slides

## A Cautionary Tale

Mitchell Kates

# 250 words / minute

# Read

# 150 words / minute

# Speaks

# ENTITLEMENT REFORMS & SAVINGS

- Sets up a new sequestration process to cut spending across-the-board – and ensure that any debt limit increase is met with greater spending cuts – IF Joint Committee fails to achieve at least $1.2T in deficit reduction.

- If this happens, POTUS may request up to $1.2T for a debt limit increase, and if granted, then across-the-board spending cuts would result that would equal the difference between $1.2T and the deficit reduction enacted as a result of Joint Committee.

- Across-the-board spending cuts would apply to FYs 2013-2021, and apply to both mandatory & discretionary programs.

- Total reductions would be equally split between defense and non-defense programs. Across-the-board cuts would also apply to Medicare. Other programs, including Social Security, Medicaid, veterans, and civil & military pay, would be exempt.

- Sequestration process is designed to guarantee that Congress acts on the Joint Committee's legislation to cut spending.

★ ★ ★ SPEAKER JOHN BOEHNER ★ ★ ★

# AMAZON STAFF MEETINGS: "NO POWERPOINT"

November 30, 2012 · by Conor Neill · in Decision Making, Great Presentations, Organisation Behaviour, Powerpoint, Public Speaking

"We have study hall at the beginning of our meetings." says Jeff Bezos.

Staff meetings at Amazon begin with 30 minutes of silent reading.

## Powerpoint is easy for presenter, hard for audience

"The traditional kind of corporate meeting starts with a presentation. Somebody gets up in front of the room and presents with a powerpoint presentation, some type of slide show. In our view you get very little information, you get bullet points. This is easy for the presenter, but

(I wish to remark here that I regard "double focussing" and "stage scanning"
as two separate innovations;it would be possible to use each independently of
the other in microscopy;the fact is that when both are used we obtain a
very convenient and versatile instrument.)


In the"stage-scanning" microscope no part of the optical system need be in motion
except the specimen and its immediately mounting. The specimen itself is moved
in some regular pattern in such a way that the vertex of the illumination cone
described in (3) above describes a raster within the specimen. This raster must
of course be fine enough to reveal the details of the specimen which are being
studied. The advantage of this method (of moving the specimen rather than
parts of the optical system) is that once the optical system has been adjusted
for one point of the specimen,no further adjustment will be required,in general,
for examination of other parts. In the instrument that I have constructed,
the motion of the specimen is obtained by mounting the specimen on an electrically
driven tuning fork,which tuning fork in turn is mounted so as to move in a directit
direction perpendicular to the faster vibration of the tuning fork. The
result is that the specimen is moved in such a manner that the illumination point
described a"raster"within the specimen. Many other ways of moving the specimen
are imaginable;the innovation is the very idea of such motion. The tuning fork
method just described is particularly convenient in that the the electric signals
which determine the position of the specimen can also be conveniently be used
to determine a corresponding position for the beam of a cathode ray oscillo-
graph or other two-dimensional display device,and the information used
obtained by the photocell (5) can be displayed (for example,as brightness)on
this two dimensional display,thus forming an image of the specimen.
        A feature of this instrument which is not obtainable in conventional
microscopy,is that there is no necessity that the plane of the specimen
being examined need be perpendicular to the optical axis of the instrument
or that of the mounting of the specimen. For the motion of scanning may
be made to include a component along the optic axis,(limited only be the working
"working distance" of the objectives". This feature may be of great value
in microscopy.
A converse of this system would be to fix the specimen and move the entire
optical system. This would in general be much less convenient,but in the
case that the specimen of interest happens to be immovable,it might be useful.

A related method,which I would not consider a perfect converse,would be
to move only the two pinholes. As will be explained,however,such an instrument
would lose an essential optical aspect of the present invention,in that all
light rays of importance are in the plane of the  planes containing the optic
axis.


III. I will now describe certain features of the system described above,and
then certain features resulting when some modifications are introduced. Each
of these features results in new domains of applicability.

A.   The optical system as described has the novel feature that ( :all
            light rays originate at a point of the optical axis of the
            instrument,and only rays which terminate at another point

Result-Driven Design

- Robust 24/7 deliverables to end users
- Client focused value-added best practices
- Scalable enterprise wide benchmarks
- Mission-critical best of breed cutting edge knowledge bases

or

# Spelke introduced us to language jamming

If we are deliver exceptional presentations, we must discover what pieces of a presentation our audience will remember.

# Steps

- Test presentation recollection

- Discover how people transition between slides and the speaker

- Analyze how information is remembered in the brain

# Steps

- **Test presentation recollection ✔**

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# 2
## Groups

# 10

## Male, MIT Freshman Participants

Same **EXACT** content

**Example Slide for Group 1:**

Django was started by two 2 people who worked in a newsroom

They need a good way to store and access articles

You can update and retreive articles very easily

**Example Slide for Group 2:**

When you have lots of data, Django is a good option for web development

Django already builds the framework, which saves a lot of time

Django is flexible and lets you use any database
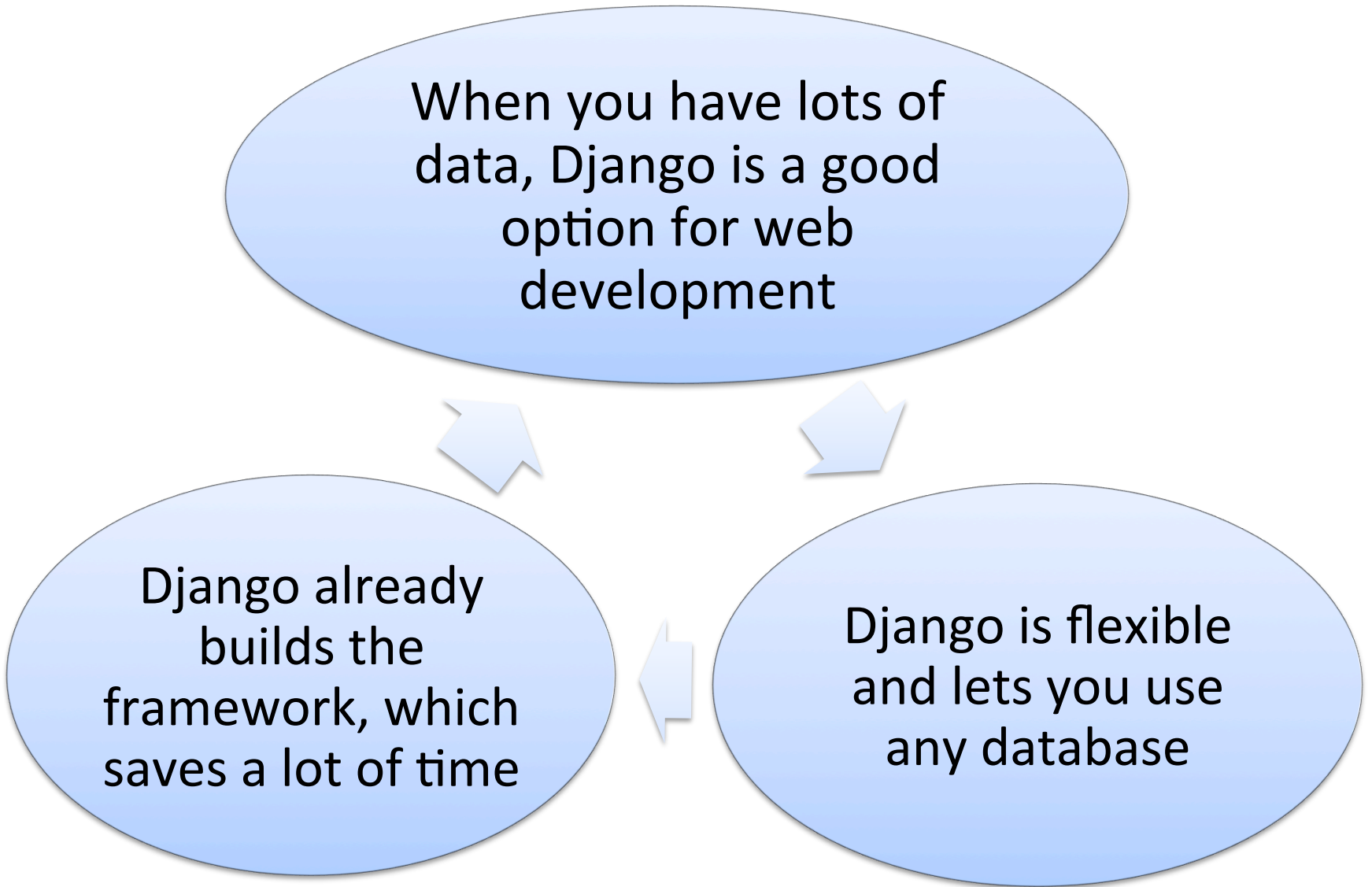
# Key Methodology Notes

- Mixed in matching slide text vs. spoken text

- Uninformed about reason for study

- Informed about quiz

- Small prize to highest scorer

2. Django is ideal because:
   a) It makes it easier to retrieve data
   b) Give users more freedom
   c) It isn't objected oriented
   d) Makes data visible to users

3. Django helps the coder by already building the _____

4. Django lets you use any _____
   a) Language
   b) Database
   c) Back End
   d) Front-End

5. Circle ALL of the following components mentioned in the presentation:
   1. Controllers          5. Settings
   2. Models               6. Admin
   3. URL Dispatcher       7. Initializer
   4. Views                8. Templates

6. You download 3rd party plugins from _____

7. T or F Plugins leverage problems solved by the Django creators

8. Django plugins are added into the _____ file

9. T or F Anybody can develop a plugin for Django

10. Circle ALL of the following companies who use Django:
   1.Gemvara               6. Disqus
   2. Frequency.io         7. Nest
   3. PolitiGo             8. Capterra
   4.Fancy                 9. Chart.io
   5. Tigre                10. Healthy.com

Average Scores

Group 1: 71.2%
Group 2: 69.6%
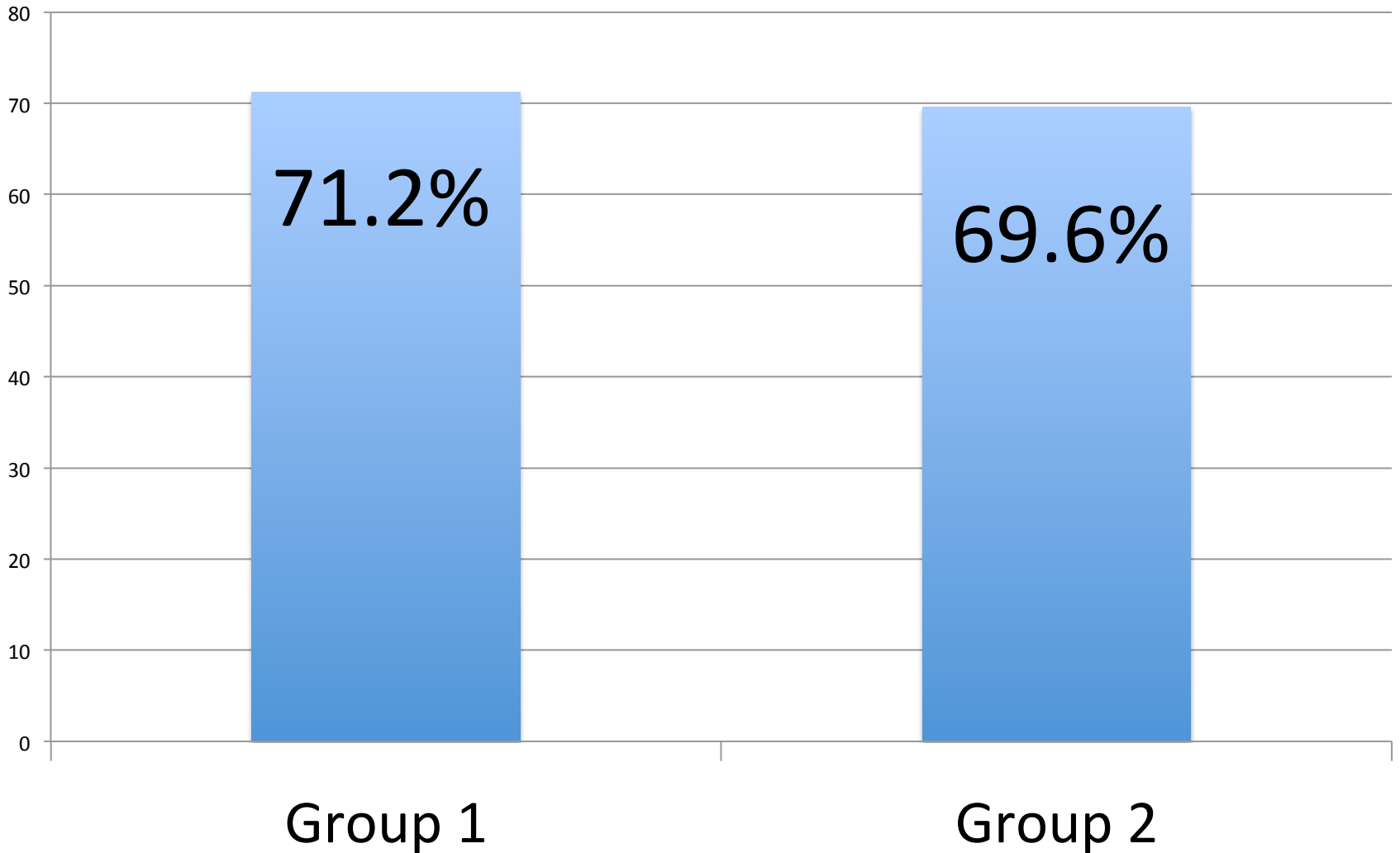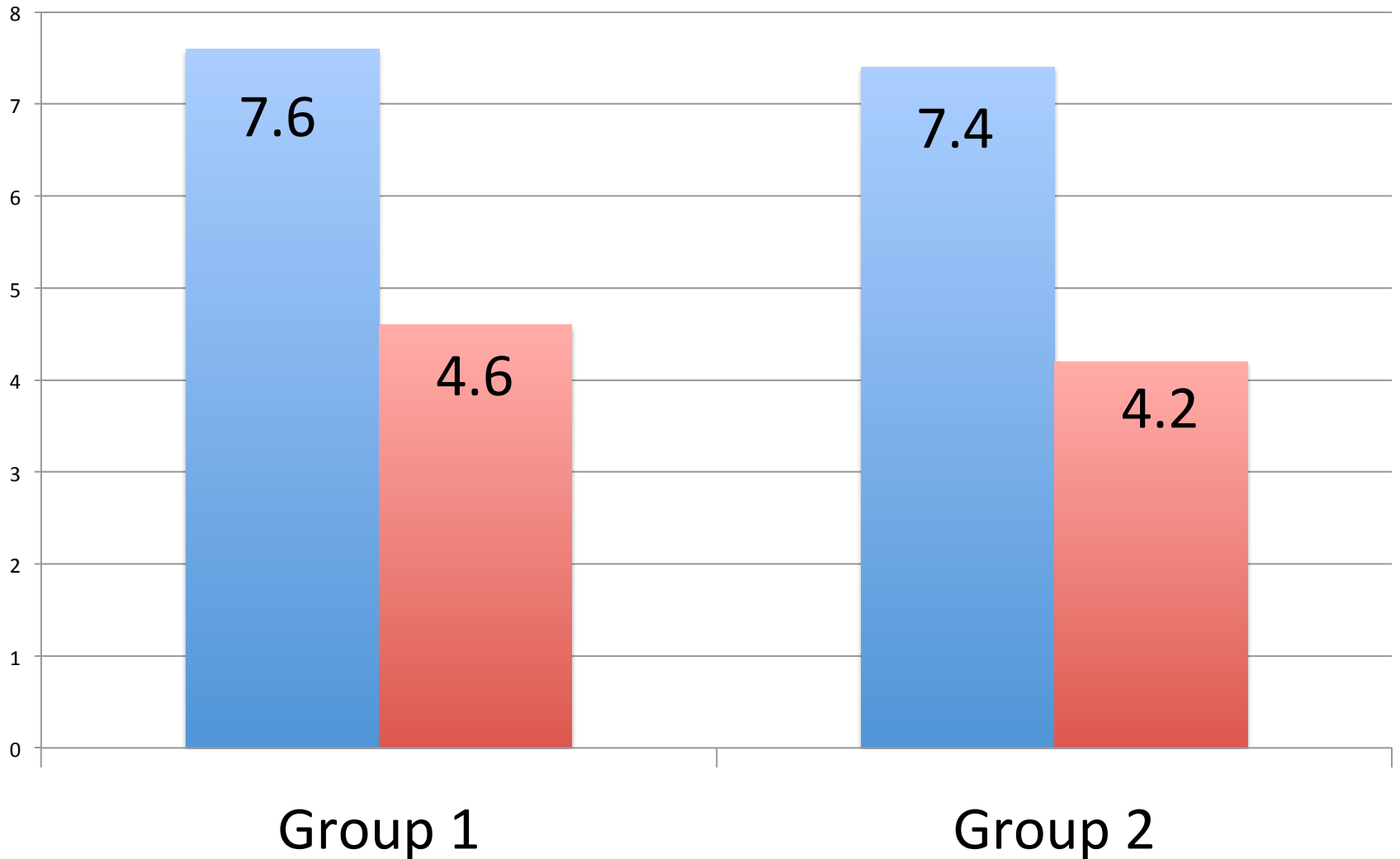
# Score Breakdown
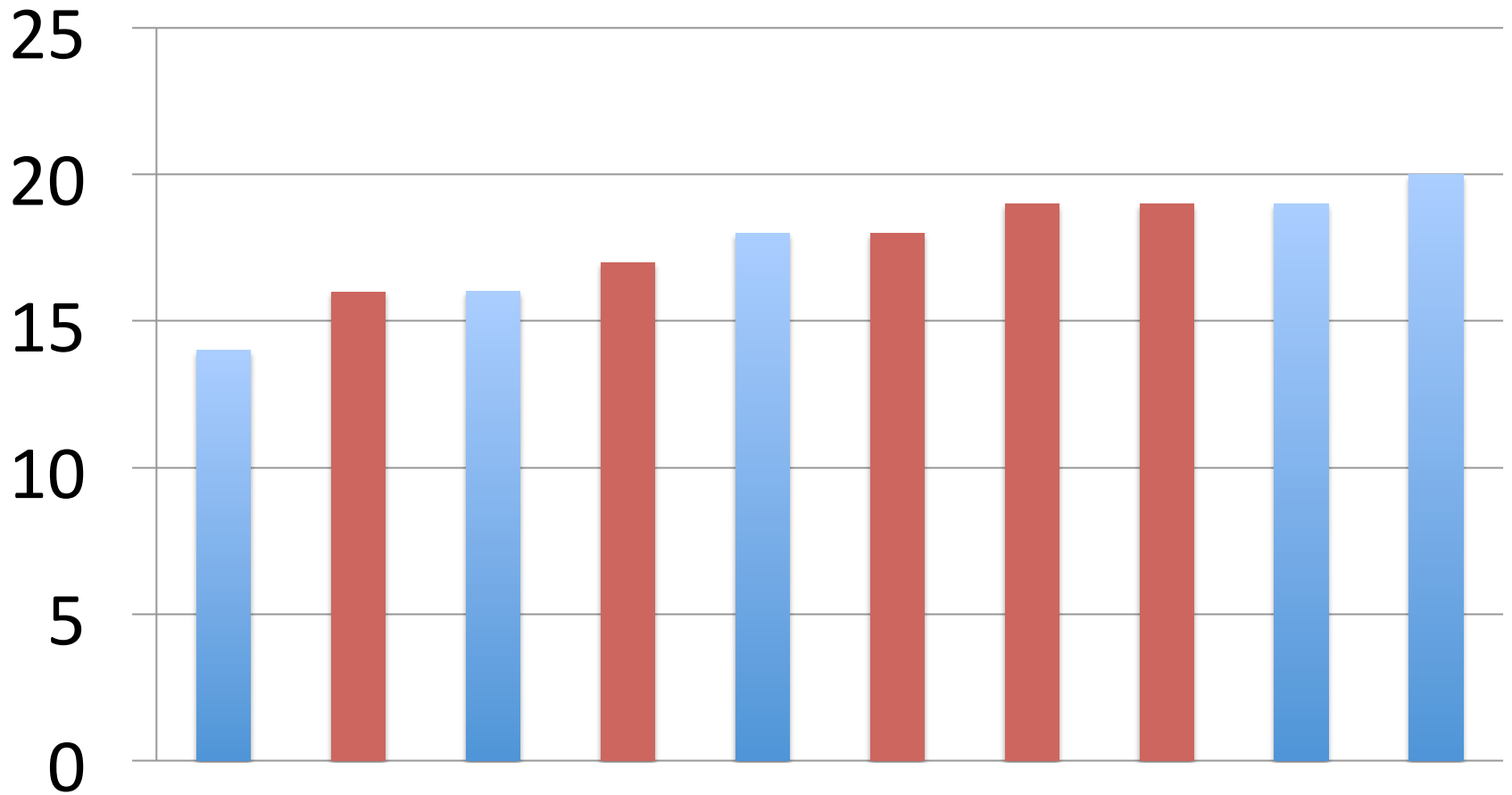
# Information on Slides vs. Spoken

When slide content interferes with verbal content, the verbal content will be missed.

"I tried to focus on both, but it was too hard"

"You were distracting us from reading the slides"

"It got confusing going back and forth from the slides to what you were saying"

"Easier to recall from slides once I saw the same information on paper. Maybe it would be different if you asked us the questions"

# FUTURE WORK

- Change quiz format to verbal

- Study if images jam language processing as well

- Long-term recall

# Contributions

- Discovered that slide content supersedes verbal content

- Confirmed Spelke's work suggesting our language processors can get jammed