PREPARING A CONFERENCE POSTER IN THE SOCIAL SCIENCES

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UCLA Graduate Writing Center

2019

Workshop Outline

- What is a conference poster?
- Contents of poster
- Design of poster
- Presenting your poster
- Where do I print?

WHAT IS A CONFERENCE POSTER?

What is a conference poster?

- Purpose: Present results (possibly preliminary)
- Audience: Experts in your broad field
- Mode of delivery: Visual and oral
- Appearance: High visual-to-text ratio

AMERICAN PSYCHOLOGICAL ASSOCIATION

ASA
AMERICAN SOCIOLOGICAL ASSOCIATION

American Educational Research Association

A · M · E · R · I · C · A · N
ANTHROPOLOGICAL
ASSOCIATION

Benefits of poster presentations

- Increased personal interaction
- More feedback
- Wider reach
- Less pressure

Challenges of poster presentations

- Make it visually interesting
- Keep text to a minimum
- Have a quick take-away message
- Prepare for questions

CONTENTS OF A POSTER

Outlining your poster

- In order of importance, write down all the points you want your viewer to understand
- Focus your poster on the first three points
- SUMMARIZE!
- Aim for approximately 800 words

Outlining your poster

- Include sections similar to a typical journal article
  - Title
  - Introduction
  - Methods
  - Results
  - Conclusions
  - References
  - Acknowledgements

Title

- May convey…
  - Overarching topic of study
  - General study approach
  - Population of interest
- Approximately 1-2 lines long
- Sentence case:

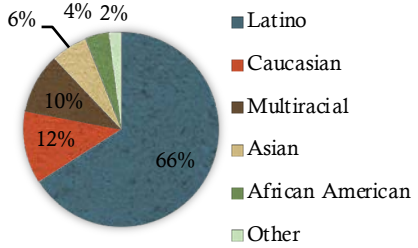
Effect of capitalization on graduate students' comprehension of English language posters

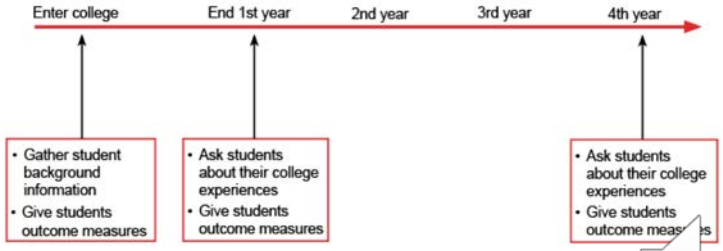
Introduction

- Pique your viewers' interest in the topic/problem
  - Use minimal background information/definitions
- Give quick, basic context of existing literature
- Propose your research questions (and hypotheses)
- Optional: Theoretical Framework; Positionality Statement
- Include photograph or illustration, if appropriate
- Approximately 200 words

Methods

- Description of sample
  - *Optional*: table or pie chart
- Summary of measures and materials
  - *Optional*: photograph or illustration
- Explanation of procedures
  - *Optional*: flow chart or diagram
- Analytic approach
- Approximately 200 words





http://www.liberalarts.wabash.edu/stu ig)/

Results

- Largest section
- Share relevant descriptive findings
- Answer your RQs
- Include figures
  - Easy to understand, even without reading poster
  - Clearly labeled
- Approximately 200 words PLUS figures

Conclusions

- Summary of major result
  - Did you support your hypotheses, if applicable?
- Implications and recommendations
  - Policy
  - Practice
- Scholarly significance and future research
- Approximately 200 words

References

- Follow standard citation format (e.g., APA)
- 5-10 citations

Acknowledgements

- Thank individuals for specific contributions
  - Participants/parents
  - Research assistants/transcribers/coders
  - Faculty advisor
- Mention your source of funding, if relevant
- Disclose any conflicts of interest, etc.
- Include contact information
  - Email address, website, QR code, etc.
- Approximately 50 words

DESIGNING YOUR POSTER

Design Process

- Choose a software
- Pick a template
- Add text
- Design visuals

Software Options

POSTERGENIUS™

PowerPoint
- Easy to use
- Widely available

PosterGenius
- Easy to use
- Free online

Adobe InDesign
- Powerful
- Requires practice

Available at CLiCC

Design Process

- Choose a software
- Pick a template
- Add text
- Design visuals

Template color schemes

- Avoid dark backgrounds with light text

- Use two or three related colors throughout your poster

Choosing a template

A good template should…

- Be organized and simple
- Contain clear sections
- Tell a linear story
- Meet the conference specifications
  - Horizontal vs. vertical
  - Often 48”W x 36”H

For templates and examples:

- http://www.posterpresentations.com/html/free_poster_templates.html
- http://colinpurrington.com/tips/poster-design

Title title

Insert your text and visuals here.

Conclusions

Insert your text here.

Literature cited

Insert your references here.

Acknowledgments

Insert your text here.

Title title

Author, Author, and Author
Institutional Affiliation

Introduction

Insert your text here.

Materials and methods

Insert your text (and visuals) here.

Results

Insert your text and visuals here.

Conclusions

Insert your text here.

Literature cited

Insert your references here.

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Introduction
Insert your text here.

Materials and methods
Insert your text (and visuals) here.

Results
Insert your text and visuals here.

Conclusions
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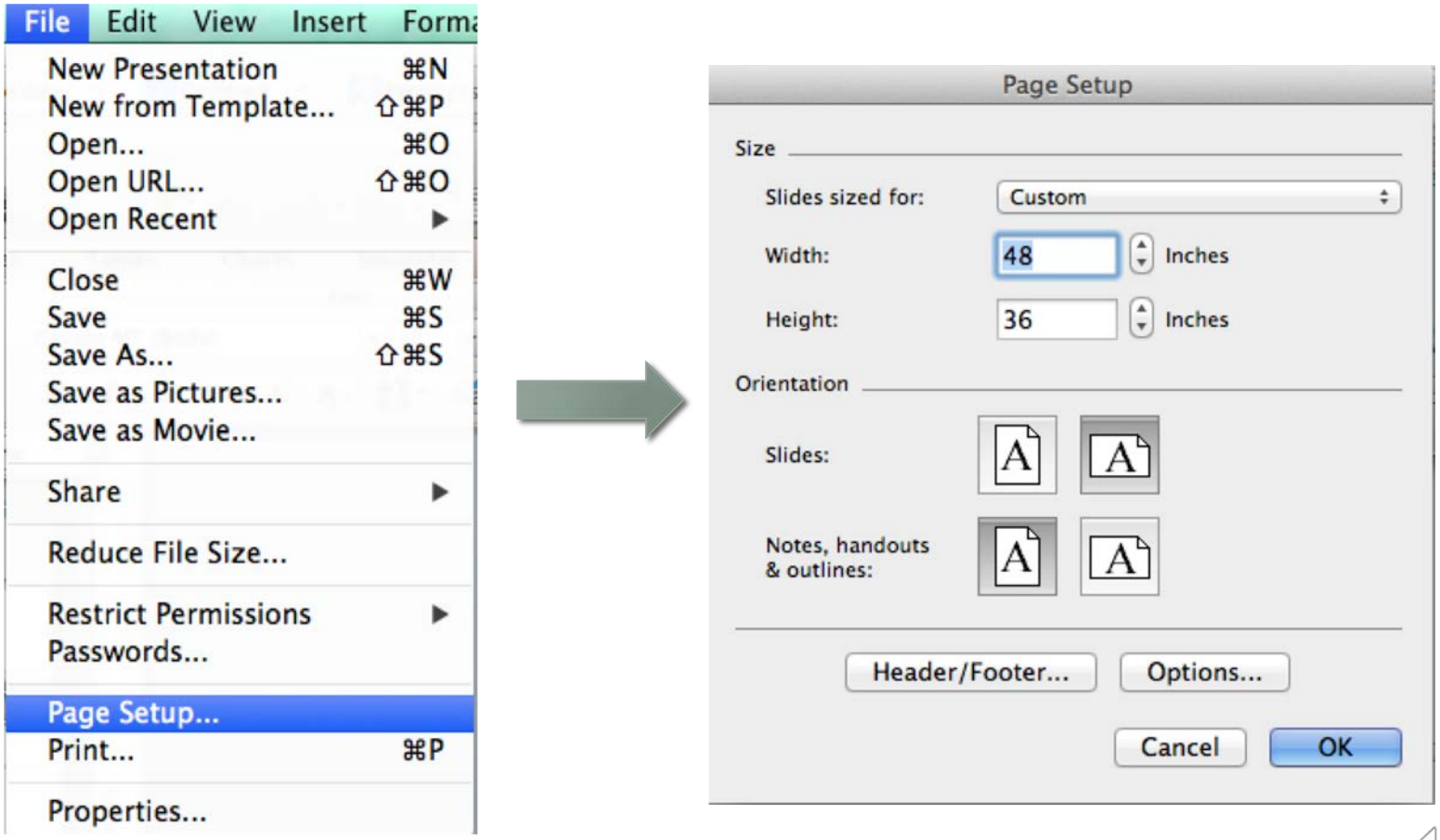
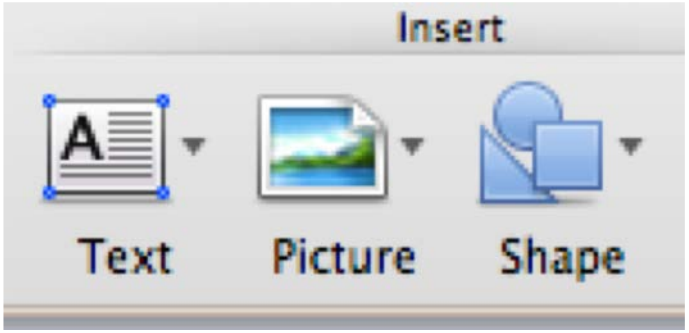
Literature cited
Insert your references here.

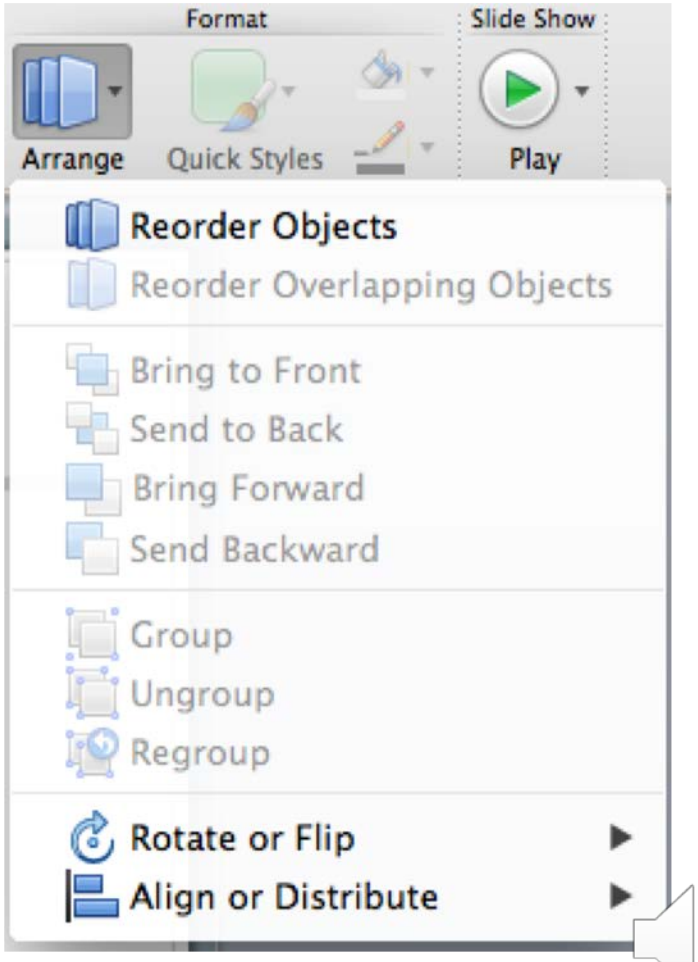
Acknowledgments
Insert your text here.

Adjust dimensions



Insert and arrange elements





Design Process

- Choose a software
- Pick a template
- Add text
- Design visuals

Adding text – Font choice

- Easy to read
- Consistent
- Some recommendations
  - Helvetica
  - Calibri
  - Gill Sans
  - Verdana
  - Georgia
  - Rockwell
  - Garamond

Sans-serif

Serif

Adding text – Font size

- Title (100-150pt)
  - Authors/Institutions (48-72pt)
  - Section headings (28-40pt)
  - Body text (24-36pt)

Adding text – Text layout

- **Boldface** for section headings
- Single-spaced body text
- Approximately 40% of poster should be white space
- Limited blocks of text
  - Width should be approx. 40 characters (~11 words)
  - Text blocks should contain fewer than 10 sentences
- Bulleted lists when possible
- Use *italics* or **boldface** to emphasize points

Design Process

- Choose a software
- Pick a template
- Add text
- Design visuals

Designing Visuals

- Self-explanatory and simple
  - No additional/unnecessary information
- Clearly convey the main point of the figure with nearby text and captions
- Types of figures
  - Use diagrams and flowcharts for theory and methods
  - Use bar graphs, scatterplots, regression plots, and other graphs for findings
- Balance visuals across the entire poster, when possible

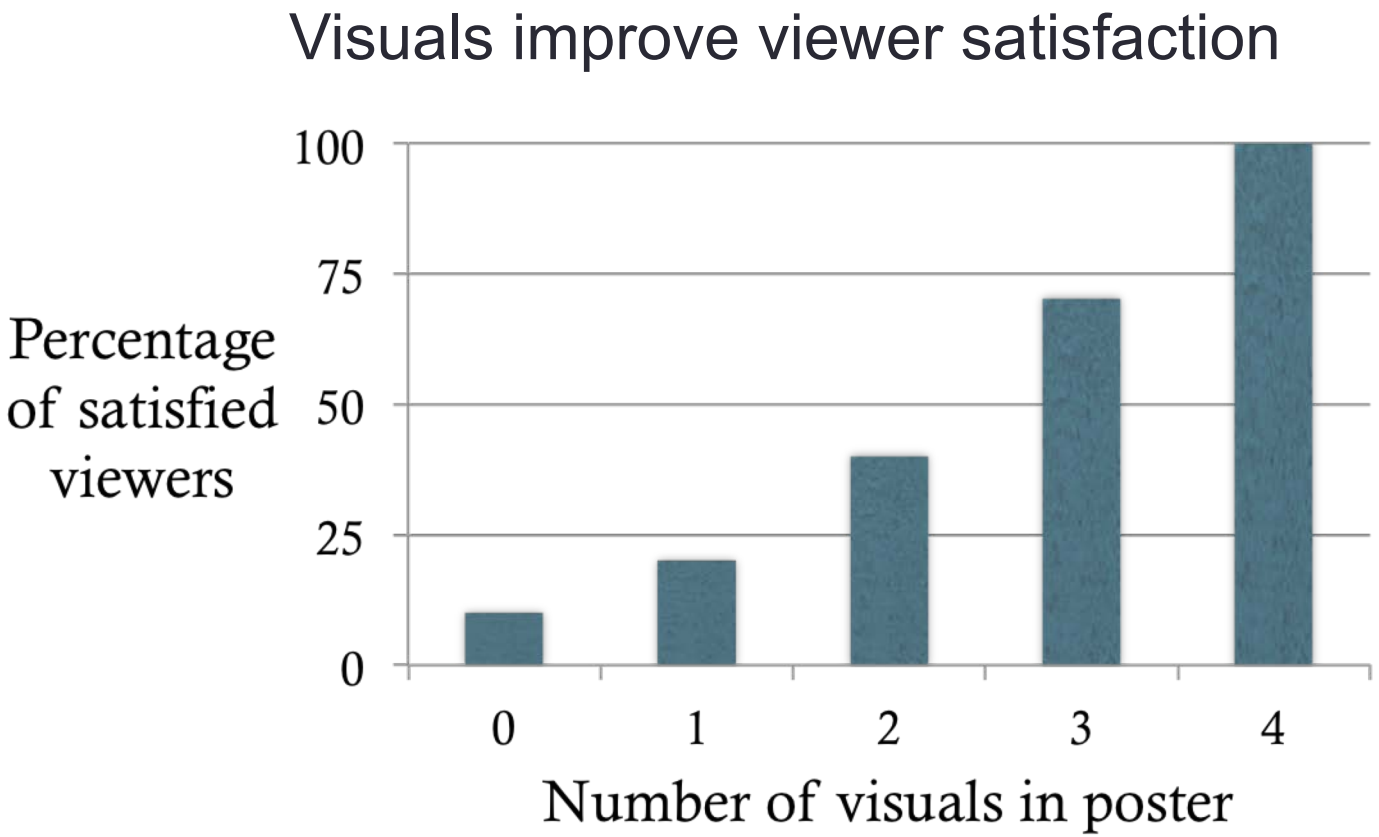
Designing Visuals

- Be mindful of color sensitivities
  - Avoid using red and green together
  - Use symbols and line patterns to differentiate data groups
- Label data directly, and avoid complex legends
- If necessary, add text boxes to provide annotation of graphs
- Display data in 2-D, without shadows or other effects
- Use high contrast and thick, clear lines

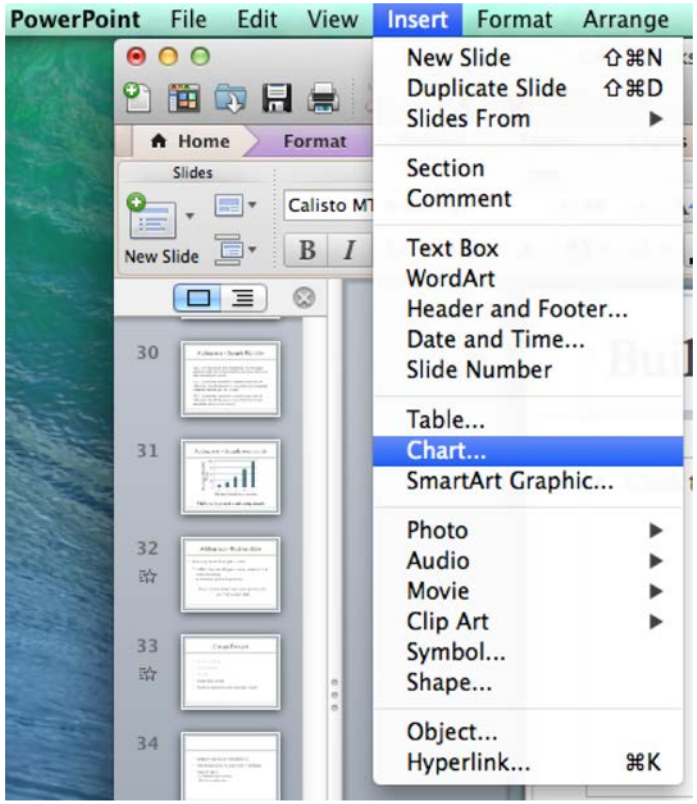
Avoid descriptive tables

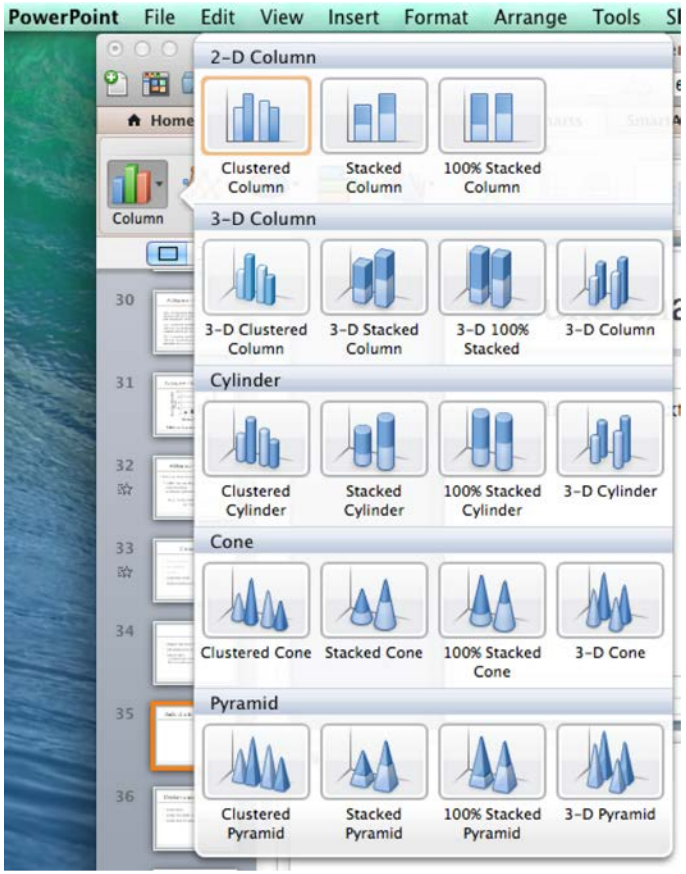
Temp °C	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean daily temp (°C)	-0.2	1.3	5.4	10.6	15.4	19.7	23.2	22.7	18.4	12.7	6.4	1.9
Mean daily high (°C)	3.7	6.1	11.4	16.7	21.9	26.4	30.1	29.7	25.7	19.5	12.0	5.8
Mean daily low (°C)	-3.5	-2.7	0.3	4.9	8.8	12.1	15.1	15.0	11.3	7.1	2.2	-1.2

Use simple figures



Building charts in PowerPoint





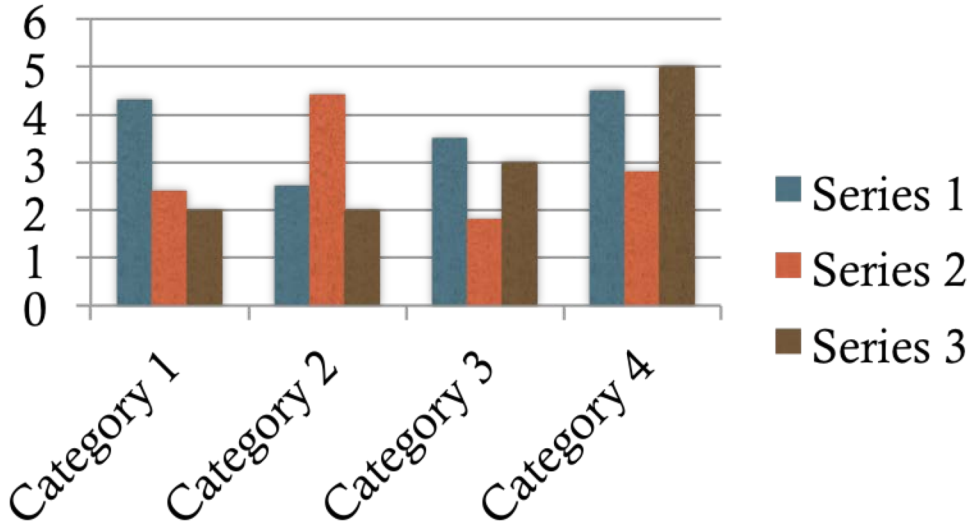
Building charts in PowerPoint

E15

	A	B	C	D
1		Series 1	Series 2	Series 3
2	Category 1	4.3	2.4	2
3	Category 2	2.5	4.4	2
4	Category 3	3.5	1.8	3
5	Category 4	4.5	2.8	5

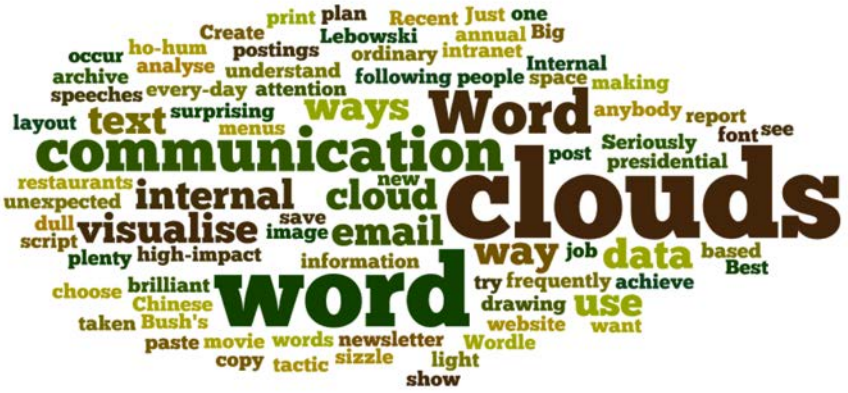
Automatically creates an Excel file…

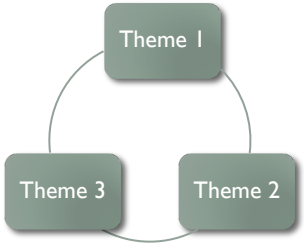
…which populates a chart in your slide



Displaying qualitative findings

- Include quotes
- Create word clouds
- Create a graphic to represent overarching themes
- Include photographs
- Include descriptive graphics and charts, if relevant





http://www.internal-communication.com/wp-content/uploads/2012/01/word-cloud-internal-co[illegible]org

Using photographs

- Ensure the resolution is sufficient when viewed at 100%
- Add a thin gray or black border around the image
- Use original photographs or those in public domain
  - Provide the source for any public domain images
- Otherwise, secure permission from the copyright owner and include a credit

Temperamental Concomitants of Maternal Feeding Practices and Beliefs in Infancy

Abstract

In this investigation we examined relationships between infant temperament and weight status, and maternal beliefs and practices regarding feeding. Mothers and babies visited the lab at 18 and 21 months of age. We found several dimensions of temperament to be associated with maternal beliefs about feeding (but less so with maternal feeding practices). Mothers of surgent babies, for example, indicated they were very aware of their babies' hunger cues, and tended not to be concerned about their babies being hungry. However, we also found that infant weight status moderated several of the relationships between infant temperament, and mothers' beliefs about feeding; suggesting that temperament may play a different role for heavier babies.

Introduction

Childhood overweight and obesity have undergone epidemic growth over the last several decades, and prevalence rates remain high (Ogden et al., 2012). Not only does excessive adiposity introduce challenges to health living, but it contributes to adult morbidity for life threatening conditions. Thus, the time course of very early child weight development should be of special interest to infancy researchers, as should accruing evidence that excessive weight gain and overweight status early in life is predictive of overweight and obesity in later childhood and adulthood.

Infant temperament has surfaced as a major predictor of all manner of later childhood outcomes. Hence, it is not surprising that researchers have begun searching for temperamental predictors of childhood overweight and obesity.

Research has found, for example, that temperamental difficulty in the first year, in combination with maternal insensitivity, places children at risk for obesity well into the middle school years (Wu, et al., 2011). Temperamental effortful control has also been associated with weight change in 18- to 21-month olds (Musacchio et al., 2012).

One way that temperament may contribute to infant obesity risk is through its impact on maternal feeding practices and beliefs (Stifter et al., 2011). For example, mothers may use food as an emotional regulatory device when they believe it helps calm down their excessively temperamentally difficult children.

Introduction (Continued)

In this study we examined associations between infant temperament and maternal feeding practices and beliefs, both directly and as moderated by infant weight-for-length (WFL).

Method

Participants. Fifty-seven typically developing, middle-class, primarily White infants and their parents visited the lab at 18 months of age, with 40 families returning to the lab for a second visit at 21 months.

Temperament. Mothers completed the *Early Childhood Behavior Questionnaire* (ECBQ; Putnam et al., 2006) prior to their 18- and 21-month visits to the lab. Three overarching temperament superdimensions were derived from the ECBQ: *Negative Affectivity*, *Surgency*, and *Effortful Control*.

Maternal Feeding Practices and Beliefs. The *Infant Feeding Questionnaire* (IFQ; Baucom et al., 2001) was completed at 18 months. Four IFQ dimensions reflected mothers' beliefs about feeding: *Concern about Infant Underweight/Undereating*, *Concern about Infant Hunger*, *Awareness of Infant Hunger/Satiety Cues*, and *Concern about Infant Overweight/Overeating*. Three dimensions reflected mothers' feeding practices: *Using Food to Calm Infant's Fussiness, Social Interaction with Infant During Feeding*, and *Feeding Infant on Schedule*.

Infant Weight Status. Infant weight was determined via Tanita digital scale. Infant recumbent length was determined via the paper-and-pencil method in which infants were asked to lie on a sheet of paper while the experimenter made a mark at the top of the head and at the heel. Weight-for-length standardized (WLZ) scores were derived from international growth curves published by the World Health Organization.

Results

Correlational analyses revealed a number of associations between temperament and maternal feeding beliefs about feeding. In fact, each of the temperament superdimensions was correlated with at least one of the maternal beliefs, at each age.

Infant temperament was most consistently correlated with three maternal beliefs: concerns about infant undereating and hunger, and awareness of infant hunger cues (see Table 1).

Results

Table 1

Correlations between Infant Temperament Superdimensions and Maternal Beliefs about Feeding

18 Months	Undereating	Hunger	Awareness
Surgency		-.23	.26
Negative Affect	.25	.26	
Effortful Control	-.23		.25
21 Months			
Surgency	-.25	-.39**	.51**
Negative Affect	.27		
Effortful Control		-.26	

**$p < .01$; all other p's $<.10$

The most robust zero-order associations involved temperamental Surgency, which was negatively associated with maternal concern about hunger, and positively associated with maternal awareness of infant hunger cues at both ages. This finding indicates that mothers of babies higher in surgency tended not to be concerned about their babies being hungry, and were more likely to be aware of their babies' hunger cues.

However further exploration revealed that infant weight status moderated the links between infant temperament and maternal feeding beliefs; which means that temperament was correlated with maternal beliefs differently depending on whether children were in the top half or bottom half of the weight distribution.

Moderated regression analyses at 18 months showed that infant weight status moderated four of the associations between temperament and maternal feeding beliefs (see Table 2). Particularly noteworthy was the moderated effect of temperament on maternal awareness of hunger cues.

The relationship between all three temperament dimensions and maternal awareness about hunger cues varied as a function of infant weight status. This kind of relationship is depicted in Figure 1.

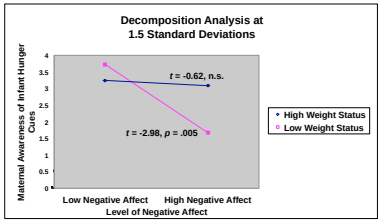
Table 2

Summary of Significant Weight Status Moderation Effects at 18 Months

Belief Outcome	Temperament Predictor	Beta (for Moderation Effect)	t	p
Awareness	Negative Affect	1.213	2.56	.014
Awareness	Surgency	.723	1.70	.097
Awareness	Effortful Control	-.901	-1.94	.059
Undereating	Surgency	-.785	-1.85	.071

Results (Continued)

Figure 1



Discussion

These results show that maternal beliefs about infant feeding are related to children's temperament. However, the direction of effects remains to be determined. The moderating role of weight status is intriguing. If temperament drives maternal feeding beliefs, it appears to do so differently for HIGH versus LOW weight status babies. Negative Affect, for example, is a strong predictor of maternal feeding beliefs for LOW weight status babies but not HIGH weight status babies. This finding may indicate that mothers of babies with low weight status, are more sensitive to hunger cues when babies are low in negative affect. Perhaps excessive negative affect overshadows hunger cues among low weight status babies.

References

Baughcum, A.E., Powers, S.W., Johnson, S.B., Chamberlin, L.A., Deeks, C.M., Jain, A., & Whitaker, R.C. (2001). Maternal feeding practices and beliefs and their relationships to overweight in early childhood. *Journal of Developmental & Behavioral Pediatrics*, *22*, 391-408.

Musacchio, K., Dixon, Jr., W.E., & Dalton, III, W.T. (April 2012). *Executive function as a moderator of obesity in infancy.* Poster presented at the Appalachian Student Research Forum, Johnson City, TN.

Ogden, C.L., Carroll, M.D., Kit, B.K., & Flegal, K.M. (2012). Prevalence of obesity and trends in body mass index among US children and adolescents, 1999-2010. *Journal of the American Medical Association*, *307*, 491-497.

Putnam, S.P., Gartstein, M.A., & Rothbart, M.K. (2006). Measurement of fine-grained aspects of toddler temperament: The Early Childhood Behavior Questionnaire. *Infant Behavior and Development*, *29*, 396-401.

Stifter, C.A., Anzman-Frasca, S., Birch, L.L., & Voegtline, K. (2011). Parent use of food to soothe infant/toddler distress and child weight status. An exploratory study. *Appetite*, *57*, 693-699.

Acknowledgements

Special thanks go to the families and children of Upper East Tennessee who participated in this study. Thanks also go to the very many research assis[illegible]nts who dedicated large portions of their lives to make the PSI functional. Final[illegible]anks to the Ronald E. McNair Program for its support and funding of this project.

Role of Participatory Mapping in Citizen Science: Challenges and Opportunities

[redacted]

Introduction

Recent advances in geospatial technology such as global navigation satellite systems (e.g. GPS), virtual globes (e.g. Google Earth), and location-based services have increased the public's exposure to geographic thinking and information[1]. This has created an unprecedented opportunity for researchers to leverage these technologies to assess the public's spatial understanding and perception of natural hazards such as flood risks[2].

Much scholarship has been devoted to the substantive, normative, and instrumental arguments in favor of public participation in the management of environmental risks[3]. However, there is considerably less research bridging theories of ideal participation with its implementation. Thus, it is unclear how to best implement the ideals of deliberative democracy into the practice of participatory risk assessment.

With support from the National Science Foundation , the Departments of Planning, Policy, and Design and Civil and Environmental Engineering at the University of California-Irvine spearheaded an interdisciplinary project to assess flood risk in Newport Beach, California. A cloud-based participatory geographic information system (PGIS) platform was created to assess public perception and awareness of flood risk in the study area.

Purpose

In exploring PGIS as a tool for engaging citizens in flood risk assessment, this poster seeks to highlight and address the challenges that the research team encountered in:

(1) Development of the PGIS platform,
(2) Implementation of the survey, and
(3) Analysis of PGIS data & data integrity.

FloodRISE
Resilient Infrastructure & Sustainable Environments

Methods

Between May 2014 and August 2014, door to door surveys were administered to 217 residents in Newport Beach, California. One component of the survey is a PGIS exercise, where local residents were asked to draw "areas at risk of flooding" within the study area. Respondents drew their responses within a custom JavaScript application using styluses, and their responses are stored in the ArcGIS Online cloud. The hardware used for the exercise are the Microsoft Surface Pro 2 tablets.

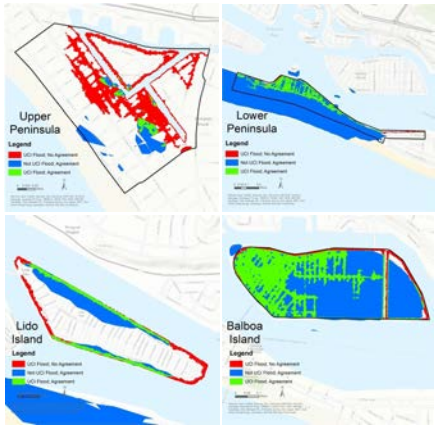
Data were analyzed in ArcGIS Desktop based on :

(1) Coincidence with each other **(collective agreement)**,
(2) Coincidence with flood models developed by FEMA and the UCI Engineering team **(model agreement)**, and
(3) Variation in agreement for different sub-regions.

Study Area

Results

We compared the areas where approximately 50% of all respondents from the study area (Entire Sample) agreed to be at risk of flooding (i.e. collective agreement, green and blue) with areas predicted to flood according to the UCI Engineering Model (i.e. model agreement, green and red). The result indicates that nearly 50% of all respondents agree that portions of Balboa Island are vulnerable to floods. The comparisons of collective agreement and model agreement at the sub-regional level show that Upper Peninsula has the least collective agreement and model agreement, while Balboa Island has the most collective agreement and model agreement.



Conclusions

Results demonstrate the need to carefully consider the scale of analysis in PGIS data. At the scale of the entire study area/entire sample, the agreement of 50% of respondents indicates that only a small area of Balboa Island is at risk of flooding. However, when the analysis is repeated at the sub-regional scale, results are much more precise and revealing, because respondents from one sub-region are likely to be more knowledgeable about flood risk in that sub-region. This shows the importance of justifying one's scale of analysis when analyzing PGIS data.

Results also indicate significant variability among the collective agreement of flood risk for different sub-regions. Variability may be attributed to different socioeconomic (e.g. home ownership, education) and demographic (e.g. age, gender) characteristics. While causes of variability have yet to be tested, variations in collective agreement suggest the need for different outreach and communication strategies to mitigate flood hazards in different sub-regions.

Lessons Learned

Lessons for future implementation of similar PGIS activities include:

(1) Piloting activity and equipment (e.g. wifi hotspot) as much as possible to identify potential issues.
(2) Precision of stylus is limited and may introduce data entry errors.
(3) Technical issues (e.g. unresponsive tablets) can discourage even the most motivated respondent.

Acknowledgement

The authors will like to thank the National Science Foundation for its generous support of the FloodRISE (Flood Resilient Infrastructure and Sustainable Environments) project (NSF DMS-1331611) at UCI. The project team also received invaluable support from its undergraduate Hazard Scholar teams.

Bibliography

1. Goodchild, M. F. (2007). Citizens as sensors: the world of [illegible]unteered geography. *GeoJournal*, *69*(4), 211–221. doi:10.1007/s[illegible]-007-9[illegible]11-y
2. Bird, D. (2009). The use of questionnaires for acq[illegible]nation on publi[illegible] perception of natural hazards and risk mitigation[illegible]cum[illegible]nt knowledge and practice. *Natural Hazards and Ea[illegible]Science*, 307–1325.
3. Fiorino, D. J. (1990). Citizen Participation and Environm[illegible] Risk: A Survey of Institutional Mechanisms. *Science, Technology & Human Values*, *15*(2), 226–243. doi:10.1177/016224399001500204

Training youth citizen scientists to conduct qualitative open-ended interviews: failure and hope at the dawn of Social Science 2.0

[redacted]

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[3]Environmental Studies, Wellesley College, Wellesley MA 02481, USA; [4]Environmental and Conservation Biology, Clark University, Worcester, MA 01610, USA

INTRODUCTION

Citizen science, often called *Science 2.0*, has typically been a technique used by natural scientists to upscale their data collection abilities. Social scientists, however, have not been quick to adopt citizen science approaches, and very little citizen science has ever been conducted where citizen scientists have been asked to carry out qualitative research using instruments such as semi-structured interviews. In countries like the Turks and Caicos Islands (TCI), where there are very few social scientists on the ground and subsequently little capacity for collecting socioecolgical data about issues such as climate change, there would be great benefits if citizen scientists could be trained to collect such data. Social science 2.0 is a real possibility if 'citizen sociology' approaches can be developed that are as productive and impactful as those employed by established citizen science programs.

OBJECTIVE

To determine whether youth citizen scientists could learn and utilize semi-structured interview techniques to a level of proficiency where they would be able to collect qualitative data of the quality necessary for integration into reports and papers written by accomplished climate change researchers.

MATERIALS AND METHODS

To measure quality of data collected by the citizen scientists in the TCI, their interviews were compared to those from a control study conducted by the School for Field Studies (SFS).

Control study

- Semi-structured interview about climate change and climate change adaptation strategies designed by SFS researchers.
- Survey instrument redesigned by SFS researchers after piloting and consultation with citizen scientists.
- 20 interviews conducted with community members on South Caicos.

Citizen science study

- 10 Students from local high school (aged 16-18) selected for participation as citizen scientists by school principal.
- 1 hour informational workshop about climate change and adaptation to it.
- 1 hour skills workshop on interviewing techniques and use of digital voice recorders.
- Students asked in 5 pairs to complete 4 interviews per pair if possible.

Analysis

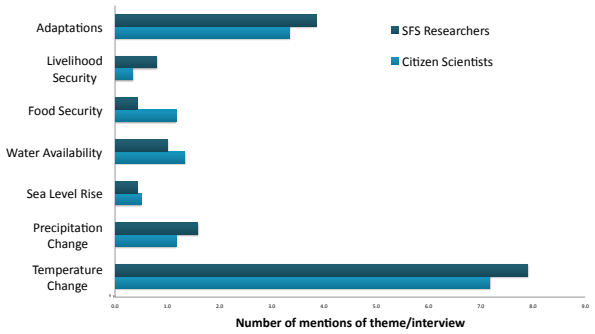
- Quantitative and qualitative discourse analysis of both sets of interviews.

	Number of interviews	Total interview minutes	SFS work minutes	SFS work minutes/ interview	SFS work minutes/ interview minute
SFS Scientist	20	602	1866 (31hours)	93	2.95
Citizen scientist	6	66	1191 (20hours)	198	18.00
Planned citizen scientist	20	300	1191 (20hours)	59.55	3.97

Effort expended by SFS researchers per interview

Research skills workshop

Detail of data elicited during interviews



RESULTS

- Citizen scientists collected little data, and SFS scientists would have been more productive had they not bothered to train the high school students.
- However, both citizen scientists and SFS scientists conducted interviews of similar quality, with each group averaging 4 themes of data collected per interview.
- Citizen scientists collected data for all the themes that SFS scientists did.
- Citizen scientists collected novel data through reaching respondents beyond the networks of SFS scientists, such as the following:

'"Well one of the things we can look at, we can start, uniting and deciding to among ourselves that we would plant trees. Number one it brings a lot of cool weather to the, the land itself and because of these, the shades from the trees, what we call, it harbor rain, it cause rain to take the land a great deal because of the huge trees, anywhere there less trees, that mean there's less shade, the ground become parched and once there's a heat wave that is ascendin' to the sky it drives the the rain clouds away. So, one of the things that we can really do is begin, planting more trees, and and be cautious in cutting down large trees that is able to help not only for rain but also, it provide good soil for for farming too."

CONCLUSION

- Poor research design by the principal investigator meant citizen scientists were not trained to a high enough standard to help SFS researchers effectively scale-up their data collection.
- The general quality of interviews conducted by citizen scientists for this study suggests that with better training citizen scientists could effectively scale up social science research efforts.

ACKNOWLEDGMENTS

The authors gratefully acknowledge the key financial and logistical support provided by The School for Field Studies (SFS) Center for Marine Resource Studies, as well as the in-kind funding of the TCI Department of Environment and Marine Affairs (DEMA). They are extremely grateful for the assistance provided by the staff of Marjorie Basden High School, and of course its citizen scientists.

USGS
science for a changing world

Crowd Sourcing The National Map: An Exploration of Volunteers and Data

The mapping crowd sourcing program, known as The National Map Corps (TNMCorps), encourages volunteers to collect man-made structures data for the U.S. Geological Survey (USGS) National Geospatial Program's web-based The National Map. This poster explores the volunteers of TNMCorps, including an overview of outreach techniques and their impact on participation. It also describes the results of an updated volunteer data quality study.

Overview of The National Map Corps

The USGS has revitalized its volunteer mapping program in light of the rapidly changing technical landscape, the increasing use of social software for citizen mapping, and mandates for more transparency and citizen involvement in government.

Current Geographic Scope: All 50 states plus Puerto Rico and the US Virgin Islands.

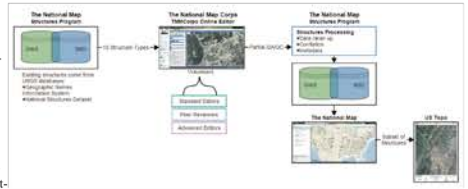
Participants: Open to the general public.

Guidelines: Easy self-starting project with online user guide and materials.

Data Focus: 10 structure types.

Source data: The National Map datasets Geographic Names (GNIS) and Structures (NSD).

Editing Interface: Customized version of OpenStreetMap's (OSM) Potlatch 2 editor.



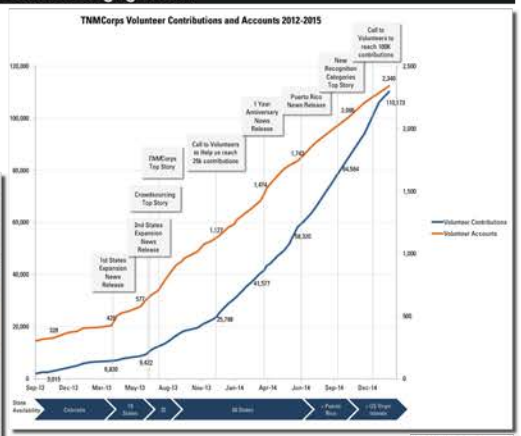
Process: Volunteers edit and verify existing points, add new points, remove obsolete points.

Tiered Editing Approach: Standard, Peer Review, Advanced.

Quality Assurance: Volunteer Peer Review, Advanced Editors, and internal USGS review.

Outreach and Volunteer Engagement

- Volunteer Recognition
- Gamification
- Social Media
- Map Challenges
- Newsletters
- USGS News Releases
- Email




A USGS facebook post highlighting one of our top contributors.

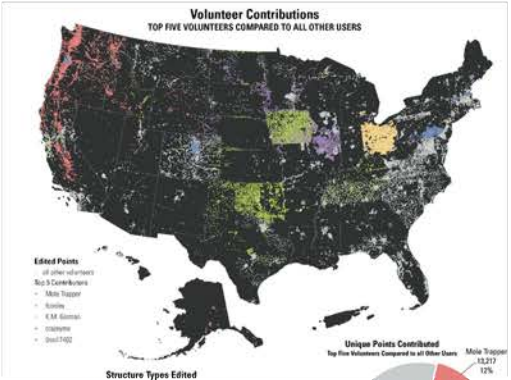

A tweet announcing recent recognition badge recipients.

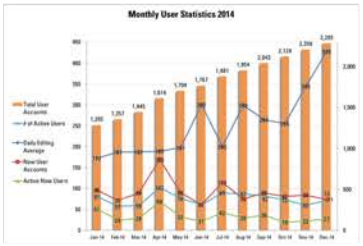
TNMCorps January 2015 Newsletter


Volunteer Recognition category members, displayed on our Recognition site.

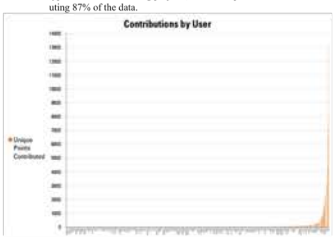

Tweets announcing a new mapping challenge and thanking the participants of the last challenge.

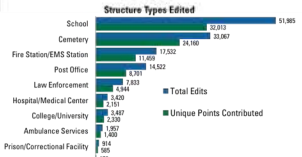
Volunteers

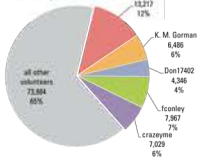




TNMCorps contributions follow the power law (long tail) distribution typical of crowd sourcing projects, with the top 10% of users contributing 87% of the data.







Data Quality

An updated data quality study was conducted during the summer of 2014. This analysis confirms the overall data collection model of the project, with volunteers improving the data across all data quality standards.The cornerstone of this model is a Wikipedia®-like hierarchy of editors and reviewers. The Colorado pilot project and the national expansion demonstrate that volunteer edits improve our baseline strucutures data; that further review by peer reviewers or advanced volunteers improves the data further; and that sample-based inspection by USGS personnel can monitor these processes.

- Entire population of 377,595 points separated into edited and unedited datasets.
- ArcGIS® Data Reviewer used to create a random sample of 96 points from each dataset, using a confidence level of 95% and a margin of error of 10%.

Esri's data reviewer uses this standard formula:

$$\text{Sample size} = \frac{Z^2 * p * (1-p)}{M^2}$$

where

Z = Z value (e.g., 1.96 for a 95% confidence interval)

p = Estimated incidence of the characteristic of interest in the population, expressed as a decimal percent (e.g., 0.3=30%). 0.5 maximizes the value p(1-p), so is commonly used as a default.

m = acceptable margin of error, expressed as a decimal (e.g., 0.10 = + 10%)

For each sampled point, USGS project staff evaluated:

1) errors of commission

Points identified falsely, where no actual feature exists. It is usually possible, though often expensive, to determine whether or not a given feature exists in the real world. Independent confirmation of feature existence was attempted for every point sampled in this study. The removal of a false point by a volunteer is a data improvement, and counts as a "pass" during evaluation. Any points that are found to not exist in the real world are counted as a "fail" for this evaluation. Subsequently, the number of points deemed "errors of commission" are removed from the total sample size for the positional and attribute accuracy calculations.

2) positional accuracy

Points are positioned relative to NAIP orthoimagery in the TNMCorps editor. A point passes the horizontal accuracy test if it falls within the visual footprint of the correct building at a scale of 1:18,056. This scale was used to evaluate positional accuracy because US Topo maps are at a scale of 1:24,000, so if the point falls within the footprint at this scale it will be on the building at a scale of 1:24,000. The closest, larger scale in the set zoom levels in the editor is 1:18,056.

3) attribute accuracy

Name is a required attribute, street address is optional. For a point to pass the attribute accuracy test, the name must agree with the name found in an independent authoritative source (such as the official website for the facility). Because address is an optional attribute, it was not included in this evaluation.

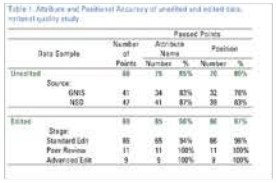


Table 1. Attribute and Positional Accuracy of unedited and edited data: national quality study.

Data Sample	Number of Points	Passed Points: Attribute Name Number	%	Position Number	%
Unedited	88	75	85%	70	80%
Source:					
GNIS	41	34	83%	32	78%
NSD	47	41	87%	38	83%
Edited	88	85	96%	86	97%
Stage:					
Standard Edit	85	65	94%	66	96%
Peer Review	11	11	100%	11	100%
Advanced Edit	9	9	100%	9	100%

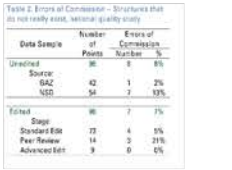


Table 2. Errors of Commission – Structures that do not really exist, national quality study

Data Sample	Number of Points	Errors of Commission Number	%
Unedited	96	8	8%
Source:			
GAZ	42	1	2%
NSD	54	7	13%
Edited	96	7	7%
Stage:			
Standard Edit	77	4	5%
Peer Review	14	3	21%
Advanced Edit	9	0	0%

crazeyme

"In February, 2014 there was an earthquake near where we live and my mom, who grew up in earthquake-prone Los Angeles, wanted to know the details right away. She went to the USGS website and got the answers to her questions, and then she saw a link about volunteer opportunities and specifically, the TNMCorps. Since I am giving consideration to potential college majors and future careers, and with the summer approaching, we both thought it would be a good way to see if I liked some of the work the USGS has to offer, because I already enjoy using a computer. I also wanted to see what a real part-time job was like, so I dedicate 4 hours a day, Monday through Friday, to volunteering. The National Map Corps makes it easy for anyone to volunteer, since all assistance can be done from home, so long as you have a computer with internet access. I can make my own schedule, which is a major plus. I decided to focus on locating and editing cemeteries because there are loads that need to be identified, and I was already aware of websites that could be used to check the edits. I've only been working for a month and already I've discovers interesting facts, like where Sacagawea is buried, and all of the unique names for places around the country. I also like the idea of continuing the tradition of service to our nation, since a member of my family has served in each generation since the Revolutionary War!"

-Volunteer crazeyme, July 8, 2014

Don17402

Don is a retired IT Manager from York, PA. "I've always been fascinated by maps and cartography," says Don, "I joined the TNMCorps in 2005 when we were collecting GPS coordinates in the field. I really enjoy verifying structures because of the innate challenges. It's a unique combination of validating structures from aerial photographs and web based research. I've also found it to be an excellent geography lesson. In my research I have learned many things about communities that I most likely would not have been able to experience first hand." Don sees the value of a good map, "A good map is like a good mate, when you're lost, they both show you the way home."

-Volunteer Don17402, August 12, 2013

Get Involved!

You can find out more about TNMCorps and sign up to participate here: **http://nationalmap.gov/TheNati[illegible]lMapCorps**

Contact us at **nati[illegible]ps@usgs.gov**

U.S. Department of the Interior
U.S. Geological Survey

Februar[illegible] 2015

Cross-Sectional Comparisons of Elementary Students' Oral and Written Explanations about Academic and Non-Academic Tasks

45

BACKGROUND

- **Written language differs from oral language** in terms of vocabulary, syntax, and discourse structure (Chafe & Tannen, 1987), and the two modalities involve distinct processes (Berninger et al., 2006)
- In spite of these differences, productive oral language skills are theorized to contribute to fluent written text generation (McCutchen, 2000)
- There have been mixed findings about the relationship between oral and written language in the elementary years
  - Children may struggle to meet the **additional demands of written** language (McCutchen, 2000); academic language has its own unique demands, regardless of modality (Nagy & Townsend, 2012)
  - Children's oral language is related to some aspects of written language more than others (Kent et al., 2014)
  - Some studies have found that in the early grades, oral language skills do not predict written language skills (Puranik & Al Otaiba, 2012)
- **English Learner (EL) students** differ in both oral and written language compared to their English proficient peers, and may show unique differences between their modalities (e.g., Escamilla & Coady, 2001)

AIMS & RESEARCH QUESTIONS

The current study investigates whether there are differences between the **oral and written explanations** of 3rd-6th grade students

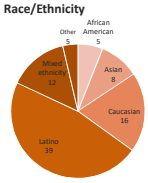
- RQ1: Do elementary students' oral explanations differ from their written explanations in terms of their vocabulary, syntax, and discourse structure when controlling for **task** (academic vs. personal routine), **grade level**, and **EL status**?
- RQ2: Does the extent of the difference between these modalities (oral vs. written) vary by **task**, **grade level**, or **EL status**?

Participants

Participants (n=83) were selected from a larger research project (*Dynamic Language Learning Progressions*; Bailey & Heritage, 2014; Bailey, 2017). The sample includes all 3rd-6th grade students who completed both tasks in both modalities.

Participants (n=83)	
Gender	
Boys: 43 (52%)	Girls: 40 (48%)
English Learner (EL) status	
EL: 17 (20%)	Non-EL: 66 (80%)
Grade Level	
3rd/4th: 40 (48%)	5th/6th: 43 (52%)

Race/Ethnicity



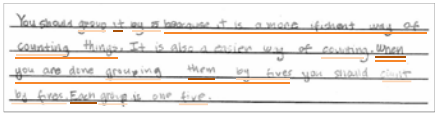
Data Collection

In one-on-one sessions with a researcher, students were asked to explain, orally and in writing:

1) how to perform an everyday personal routine (i.e., cleaning their teeth) = non-academic task
2) how to complete a math activity = academic task

ANALYSIS

Explanations (n=332) were placed on a language learning progression: *Not Evident*, *Emerging*, *Developing*, or *Controlled* in terms of three language features:



Sophistication of topic vocabulary (word level)

Sophistication of sentence structure (sentence level)

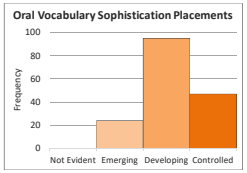
Coherence/Cohesion (discourse level)

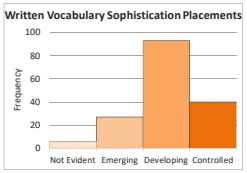
Analysis

We fit a series of multilevel mixed-effects ordered logistic models in order to determine: 1) whether there was a main effect of modality for each of the three language features; 2) whether the effect of modality remained when accounting for task, grade, and EL status; and 3) whether there were any interactions between modality and task, grade, or EL status

FINDINGS RQ1

The likelihood of receiving a higher **Vocabulary Sophistication** placement was **not significantly different** for students' oral and written explanations



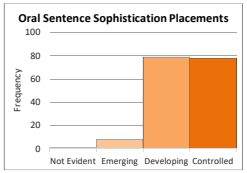


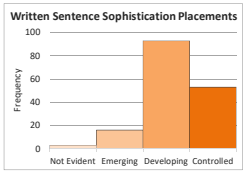
Vocabulary Sophistication

	Odds Ratio	Std. Error	z	p > |z|	95% Conf. Int.	
Modality						
Oral	1.387	.306	1.48	.139	.900	2.137
Task						
Academic	1.842	.411	2.73	.006	1.189	2.853
Grade						
5th/6th	1.534	.451	1.46	.145	.863	2.728
EL Status						
Non-EL	2.798	1.029	2.80	.005	1.361	5.751

Overall model: p < .001

Students' **oral** explanations were **more likely** than their written explanations to receive **higher Sentence Sophistication** placements, even when accounting for task, grade, and EL status



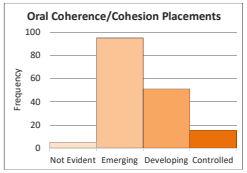


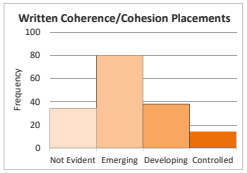
Sentence Sophistication

	Odds Ratio	Std. Error	z	p > |z|	95% Conf. Int.	
Modality						
Oral	2.127	.494	3.25	.001	1.349	3.352
Task						
Academic	2.126	.494	3.24	.001	1.348	3.354
Grade						
5th/6th	2.743	.799	3.46	.001	1.549	4.855
EL Status						
Non-EL	1.750	.621	1.58	.115	.873	3.507

Overall model: p < .001

Students' **oral** explanations were **more likely** than their written explanations to receive **higher Coherence/ Cohesion** placements, even when accounting for task, grade, and EL status





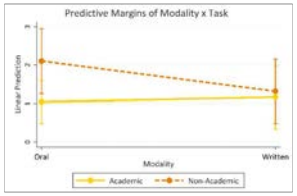
Coherence/Cohesion

	Odds Ratio	Std. Error	z	p > |z|	95% Conf. Int.	
Modality						
Oral	2.107	.465	3.38	.001	1.368	3.246
Task						
Academic	1.174	.252	0.75	.456	.770	1.789
Grade						
5th/6th	1.502	.437	1.40	.163	.849	2.657
EL Status						
Non-EL	1.840	.665	1.69	.091	.906	3.737

Overall model: p < .001

FINDINGS RQ2

- There were no interactions between modality and grade or EL status, suggesting that the the effect of modality on Vocabulary Sophistication, Sentence Sophistication, and Coherence/Cohesion did not vary by grade or EL status
- For Vocabulary Sophistication, there was an interaction between modality and task (Log odds = -.907, p = .042)
  - The effect of modality on vocabulary was stronger for students' non-academic explanations



CONCLUSIONS

- Students' oral explanations were more likely to be placed higher on the progression than their written explanations at the sentence and discourse levels
- Teachers can focus on helping students transfer their existing oral language skills into writing
- The amount of variation between the two modalities did not differ for EL vs. non-EL students or for 3rd/4th vs. 5th/6th graders
- The effect of modality on students' vocabulary sophistication differed based on task, suggesting that educators and researchers should consider the nature of the task (academic vs. non-academic) when assessing vocabulary
- Future studies should examine differences in students' oral and written language in authentic classroom settings

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ACKNOWLEDGEMENTS & CONTACT INFORMATION

This work was funded jointly by the WIDA Consortium, Wisconsin Center for Educational Research and the ASSETS Enhanced Assessment Grant from the U.S.

PRESENTING YOUR POSTER

Navigating a poster presentation

- Begin with a two sentence overview of why your study is interesting and important
  - I wanted to investigate _____.
  - I found that _____.
- Gauge their interest, and then if appropriate, go into more detail
- Plan a 10 second, 30 second, and 2 minute spiel
- If more viewers arrive mid-presentation, finish and then start again

Presenting – Attract viewers

- Smile!
- Professional attire
- Speak to viewers—do not read from poster
- Make eye contact
- Use gestures
- Bring handouts of your poster

Presenting – Sounding good

- Volume
- Keep a steady pace
- Take pauses
- Inflection
- Clarity
- Brevity – short sentences
- Word choice – avoid jargon

Taking questions

- Listen carefully
- Repeat and summarize question
- Answer thoroughly, but briefly
- Anticipate questions ahead of time
  - Deflect back as a possible direction for future resea
- If you don't know the answer, admit it!

WHERE DO I PRINT?

Printing on/near UCLA

- Contact the printing location ahead of time
  - Ask about poster printing options
    - Matte vs. lustre vs. glossy
  - Ask about availability and scheduling
- Most locations require at least 24-48 hours notice
- Email them a PDF (most likely)
  - Examine at full magnification to be sure images are crisp and colors are accurate

UCLA Poster Printing Locations and Rates

- **UCLA Psychology Technical Services**
  - Franz Hall A544
  - https://www.psych.ucla.edu/departmental-units/facilities-auxiliary-services/technical-services/graphics-and-media
  - techservices@psych.ucla.edu
  - $11.04 per linear square foot
  - 36 in. x 48 in.: $44.16

- **UCLA Life Science Illustration Office**
  - Hershey Hall, Room 210
  - illustration@lifesci.ucla.edu
  - $17 per linear square foot
  - 36 in. x 48 in.: $68

- **UCLA School of Engineering**
  - Boelter Hall, Room 2685
  - http://www.matserv.ucla.edu/services/document-services/poster-printing
  - matstdnt@ea.ucla.edu
  - $7.50 per square foot
  - 36 in. x 48 in.: $90

UCLA Poster Printing Locations and Rates

- **UCLA Design and Media Arts**
  - Broad Art Center, 4th floor
  - *Design and Media Arts students take priority, so their facilities may not be available*
  - https://support.dma.ucla.edu/print/
  - (310) 825-6803
  - $7 per square foot (matte) or $8 per square foot (lustre)
  - 36 in. x 48 in.: $84 (matte) or $96 (lustre)

- **UCLA Mail, Document & Distribution Services**
  - 555 Westwood Plaza, Level B, Los Angeles, CA 90095
  - https://www.mdds.ucla.edu/document-services
  - MDDS@mdds.ucla.edu
  - 36 in. x 48 in.: $92.00

- **Westwood FedEx Office**
  - 10924 Weyburn Ave, Los Angeles, CA 90024
  - http://local.fedex.com/ca/los-angeles/office-0897/
  - (310) 443-5501
  - 36 in. x 48 in.: $85.35 (with UCLA 10% discount)

Want More Advice?

- UCLA Graduate Writing Center (GWC)
  - http://gsrc.ucla.edu/gwc/
  - Located in the Graduate Student Resource Center
    - Room B11, Student Activities Center
- GWC Writing and Research Workshops
  - http://gsrc.ucla.edu/gwc/workshops/