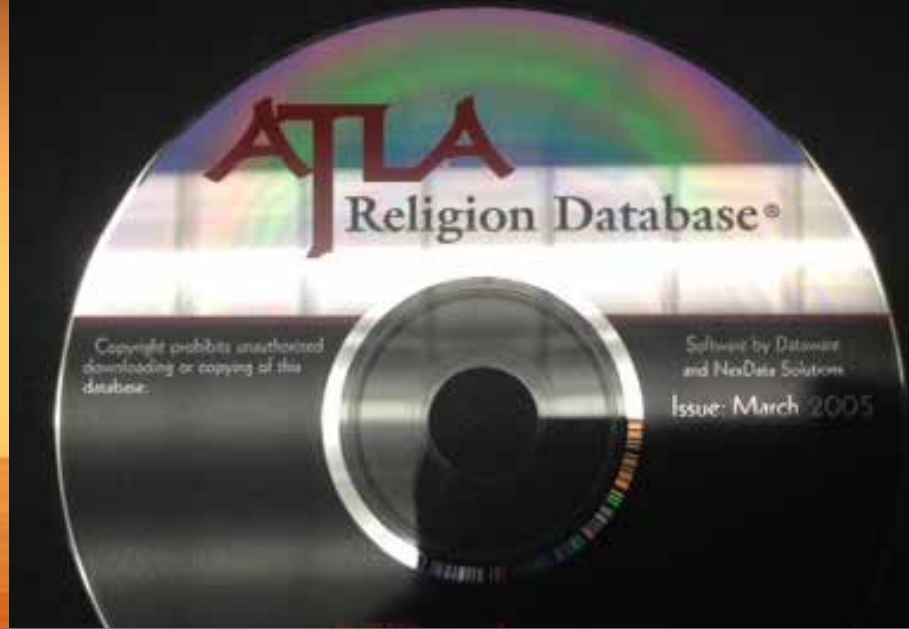
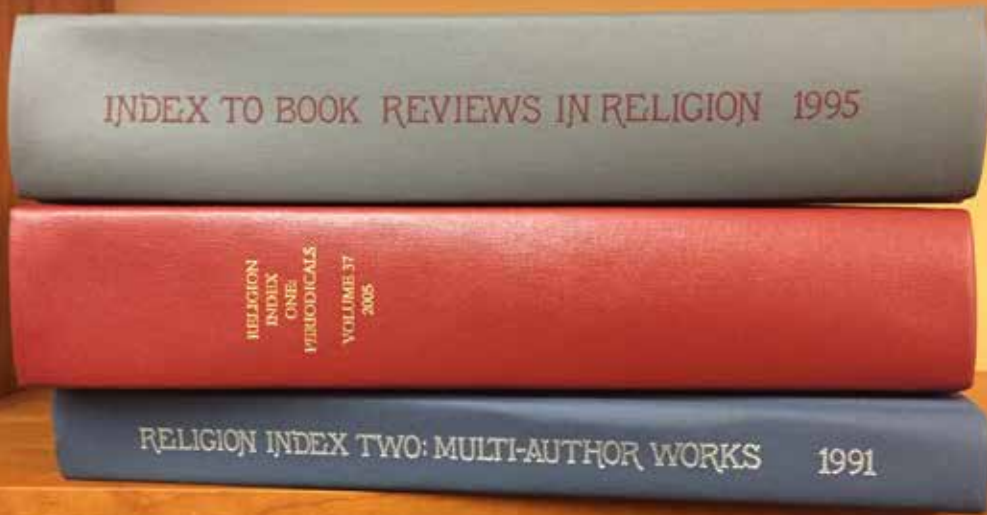


Religion and Theology Digital Scholars

How They Research and What Tools They Use

Thomas Brandenburg, Sipra Bihani, Randy Horton, and Tom MacTavish
IIT Institute of Design and 94 Westbound, Chicago



Advancements in Technology



ATLA's Motivations

As a library association, ATLA is in touch with librarians but has limited direct access to the scholars that use ATLA products.



Research Goal

ATLA partnered with the IIT Institute of Design to obtain fresh insights and perspectives on scholars in order to inspire innovative thinking for new products and services.

IIT Institute of Design

“IIT Institute of Design offers rigor and creativity—
a methods-based, human-centered approach to
global challenges.”

—Patrick Whitney

Dean and Steelcase/Robert C. Pew Professor of Design

Founded in 1937 as the New Bauhaus, we are the largest graduate-only design school in the United States, first program in the United States to offer a PhD in design and first program in the world to offer a Master of Design/MBA dual degree.

Tom MacTavish



Tom is an assistant professor at IIT Institute of Design and teaches courses related to interaction design history, theory, and practice.

For nine years before coming to ID, he directed Motorola Labs' Center for Human Interaction Research.

Phase 1



- Expert digital scholar interviews
- Stakeholders interviews
- Screening and selecting candidates

Phase 1

- Survey of secondary research
- Framing the research landscape

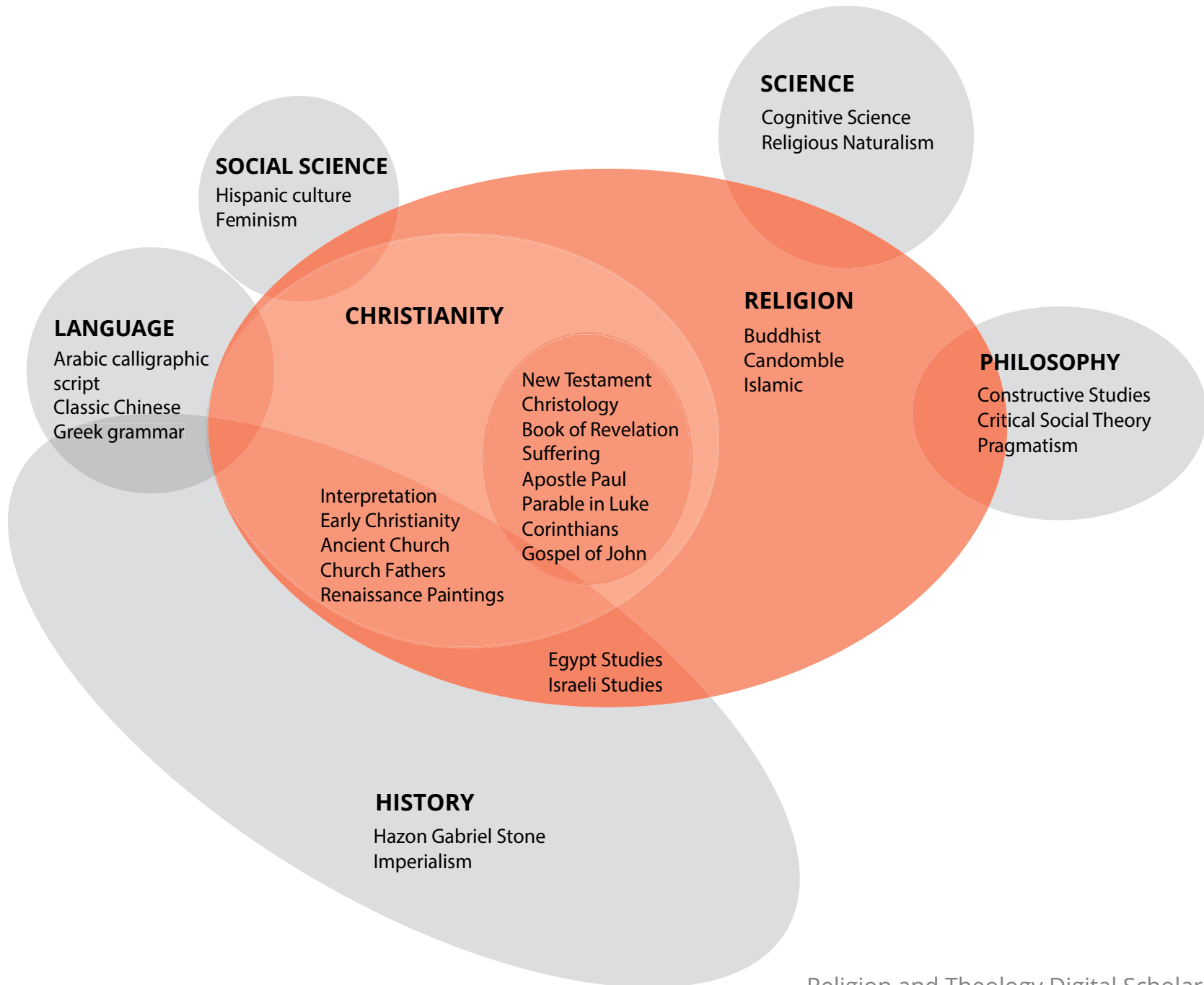
	Platforms	Open source/ access	Social media	Cloud storage	Mobile	Aggregators	Experimental tools	Full digital text	Immediacy	Digital discovery tools
	Google (drive, email, and search)	Google Scholar	Twitter	Dropbox	iPhone	Papers	The Mandala Browser	XML	Digital self publishing	EBSCO discovery service
Find	Red	Dark Red	Yellow		Green	Teal	Cyan	Dark Blue		Purple
Gather	Red					Teal				
Analyze							Cyan			
Read	Red	Dark Red	Yellow					Dark Blue		
Write/Create	Red		Yellow		Green	Teal				
Communicate	Red		Yellow		Green				Blue	
Organize	Red									Purple
Annotate						Teal				
Cite						Teal				
Reflect	Red				Green	Teal			Blue	
Share	Red		Yellow	Dark Green	Green				Blue	
Archive	Red			Dark Green		Teal				
Time management	Red				Green					

Participant Selection Criteria

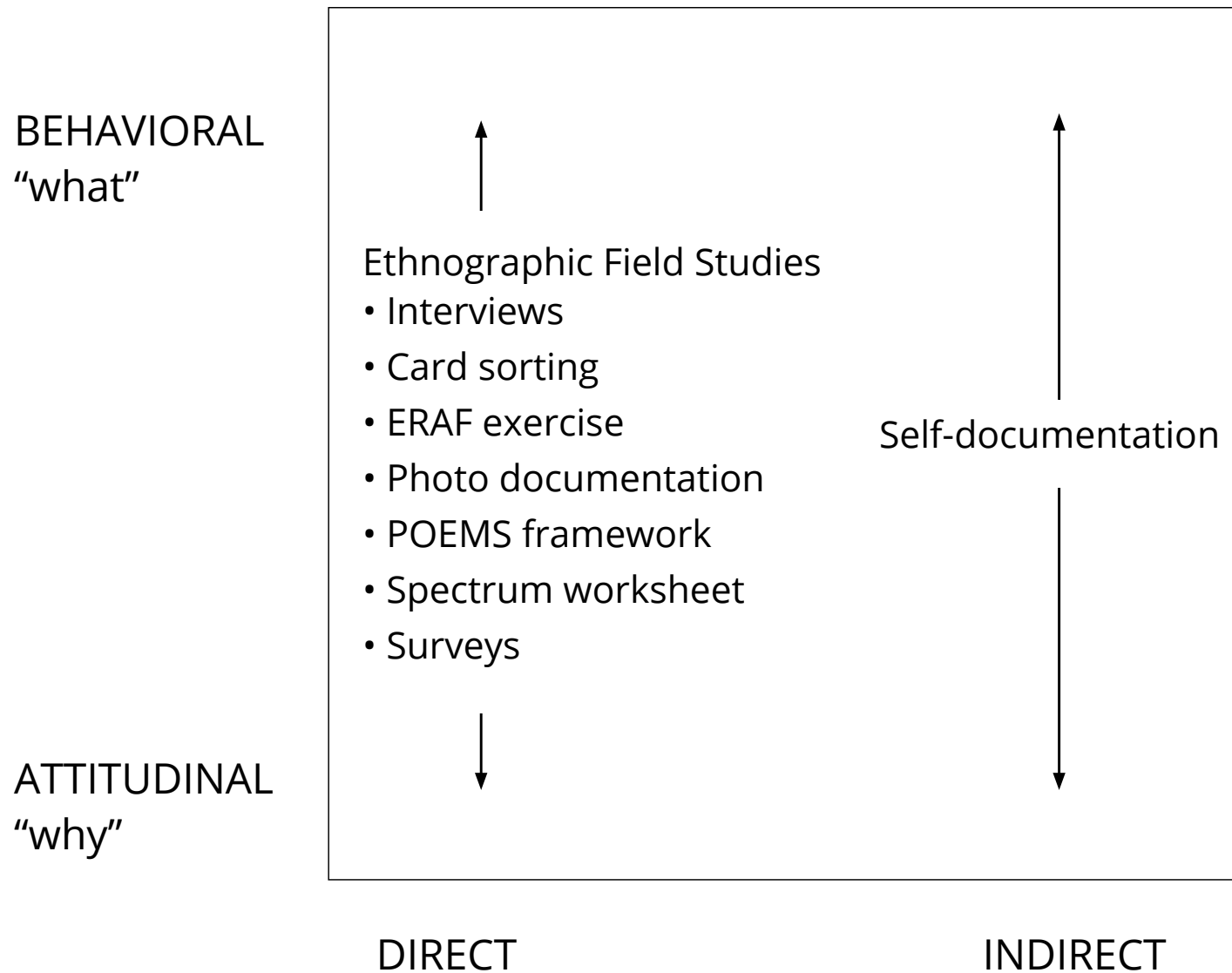
Attributes

- Gender
- Age Ranges
- Education Level
- Current Occupation
- Device Use
- ATLA Association
- Work Environment
- Research Focus

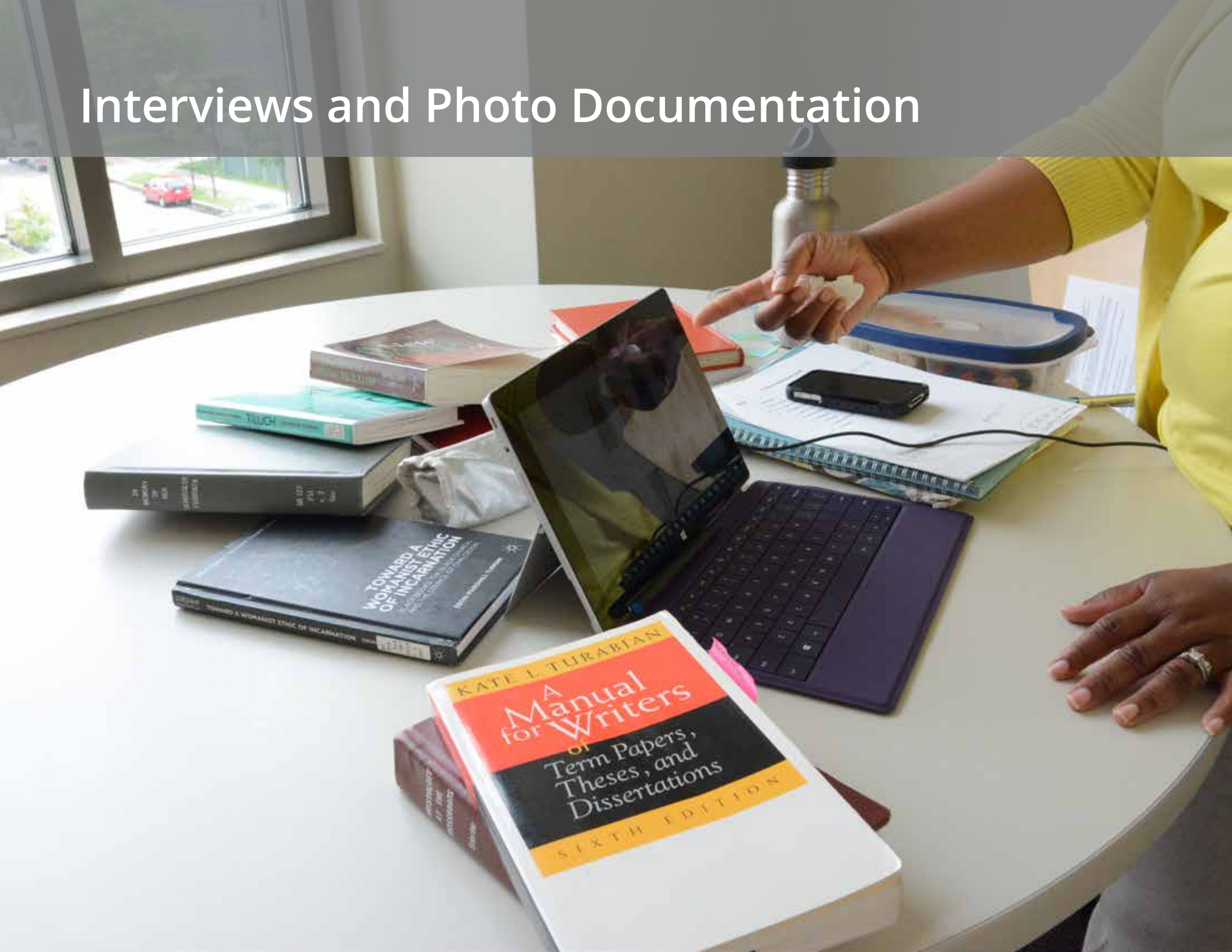
Areas of Scholarly Study or Work



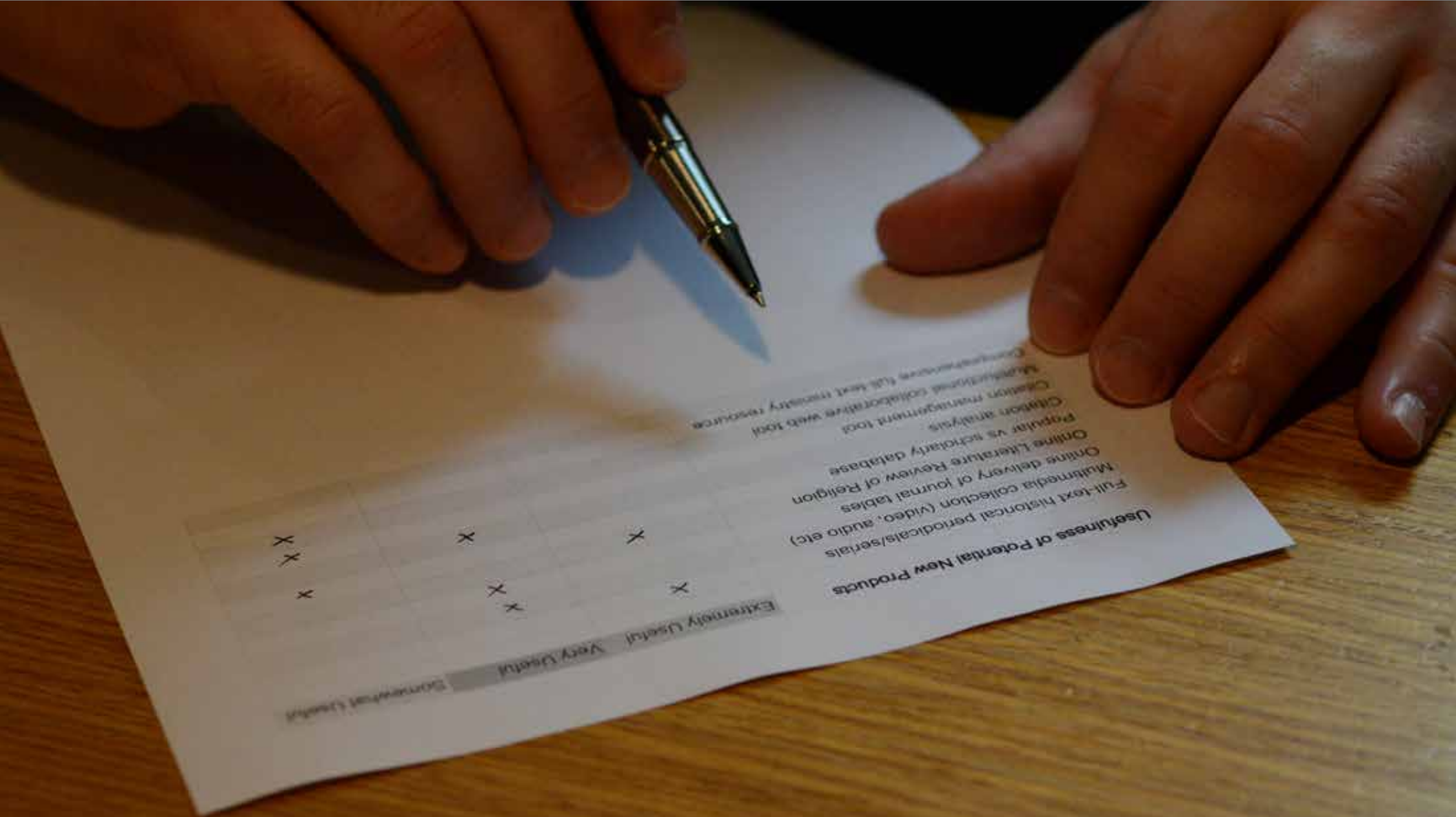
Phase 2: Research Methods



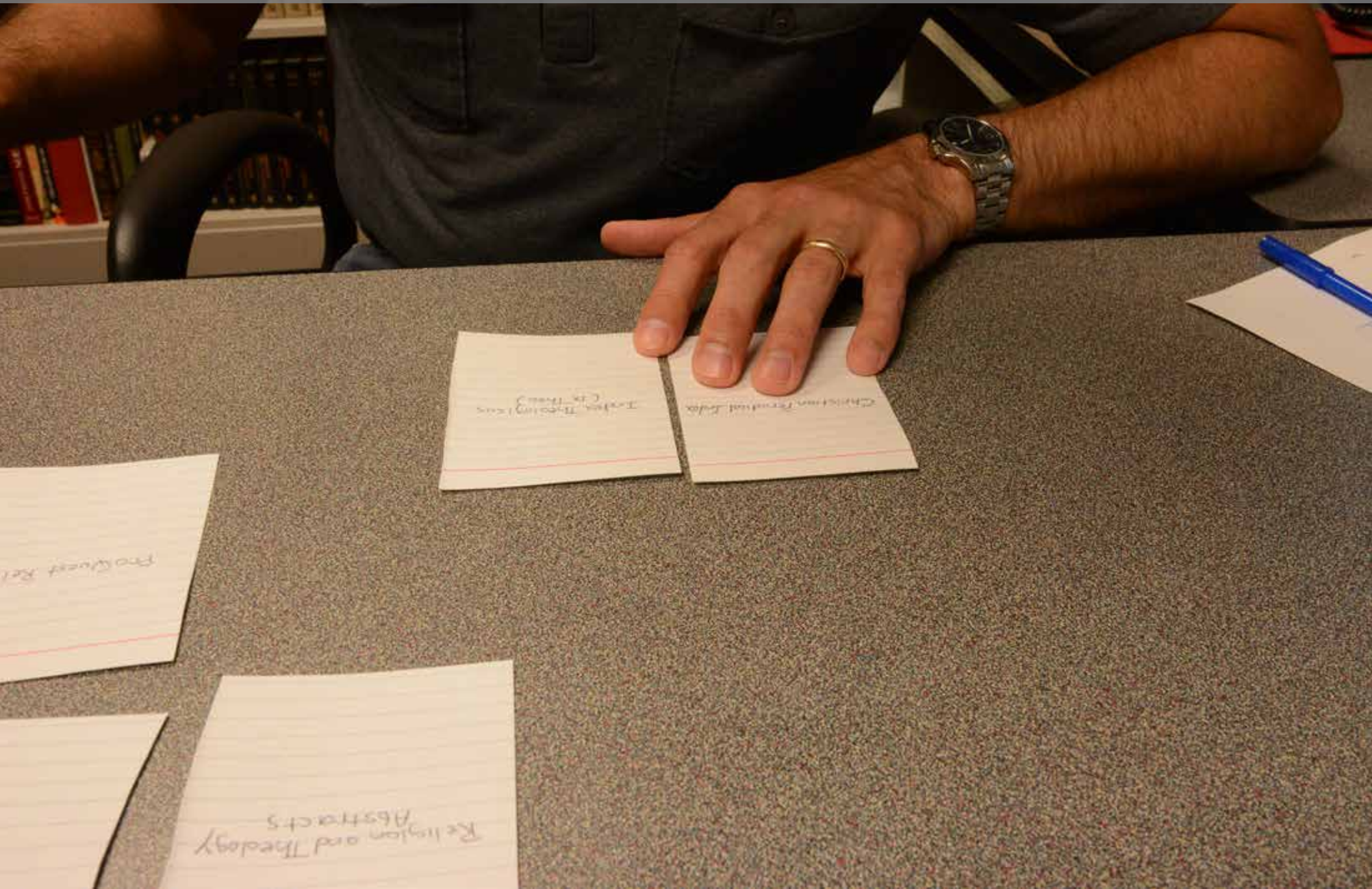
Interviews and Photo Documentation



Surveys



Card Sorting



Spectrum Worksheet



POEMS Framework



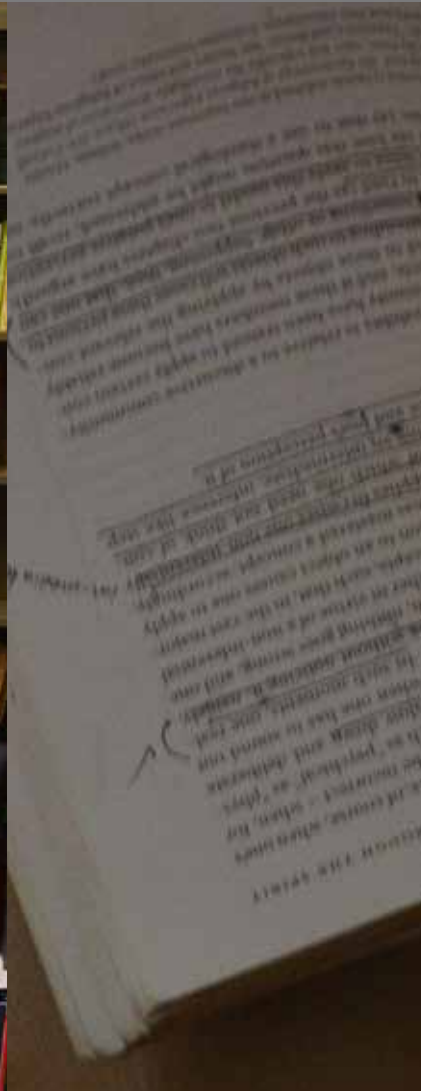
People



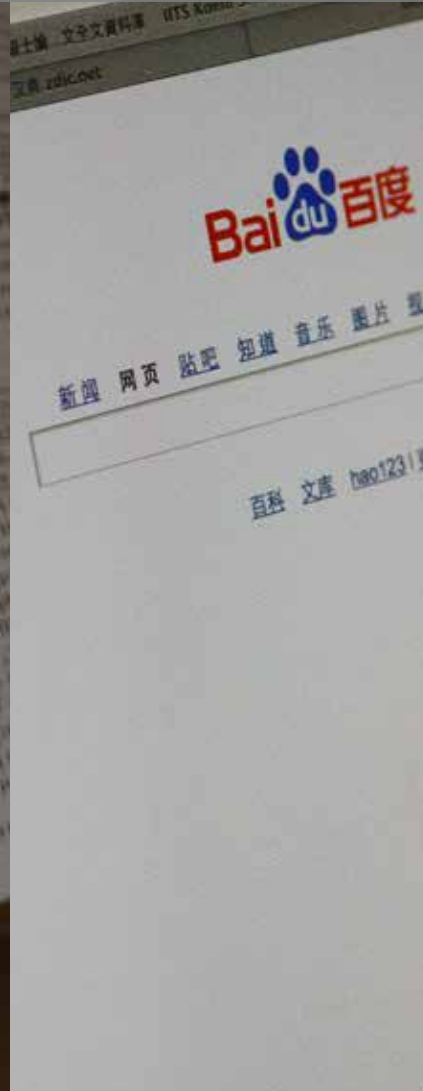
Objects



Environment



Messages



Services

ERAF Exercise



Entities **R**elationships **A**tttributes **F**lows

Self-documentation

For which block of time are you completing this form?

- Morning (until noon)
- Afternoon (noon to 4:00 pm)
- Evening (4:00 pm to 8:00 pm)
- Night (8:00 pm to midnight)

Did you work during this block of time?

If you answer "Yes" please complete the rest of the form. If you answer "No" please submit the form after this question.

- Yes
- No

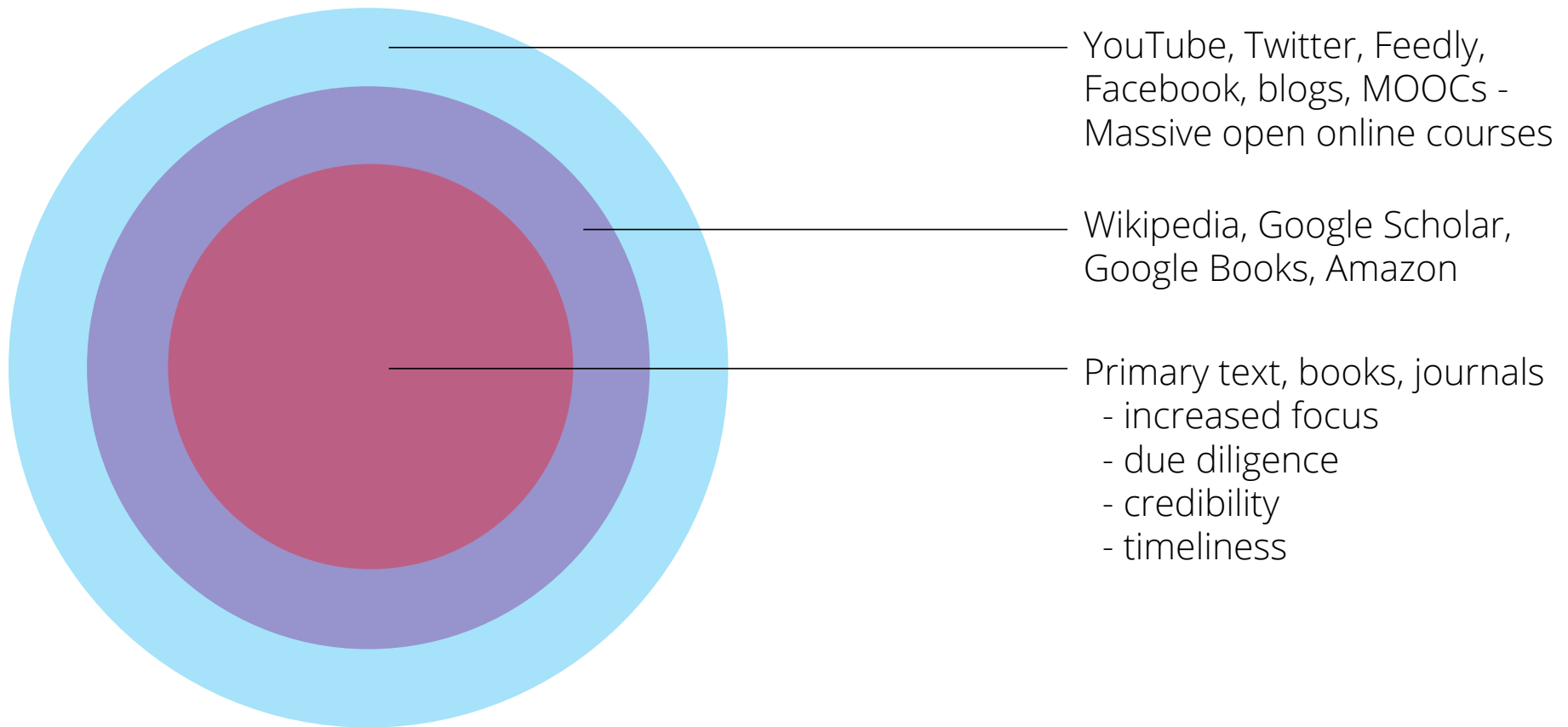
What is your current role?

- Student
- Professor/Instructor
- Researcher
- Other:

What academic or professional activities are you currently doing?

INSIGHT 1

Non-Traditional Sources of Research



INSIGHT 2

Convenience: Seamless Access Across Devices

- Scholars are using multiple devices and working across various platforms
- Scholars want to make quick inquiries and conduct in-depth research anytime and anywhere

INSIGHT 3

Efficiency: Access to Full Digital Text

“I would look first for the ones I could get full text and I would write down the other ones with the intention of getting them, but probably never would unless it is really important.”

—Candidate 2

INSIGHT 4

Limited Access to Non-Western Theological Scholarship

“There is a lot of work I would love to do, but can not do unless I pick up and go to Africa. For example, we do not get a lot of journals and publications from the global South.”

—Candidate 17

Persona Development

Attribute Spectra

F2F ↔ Virtual

Self Taught ↔ CLASS Room Taught
tools/Literacy

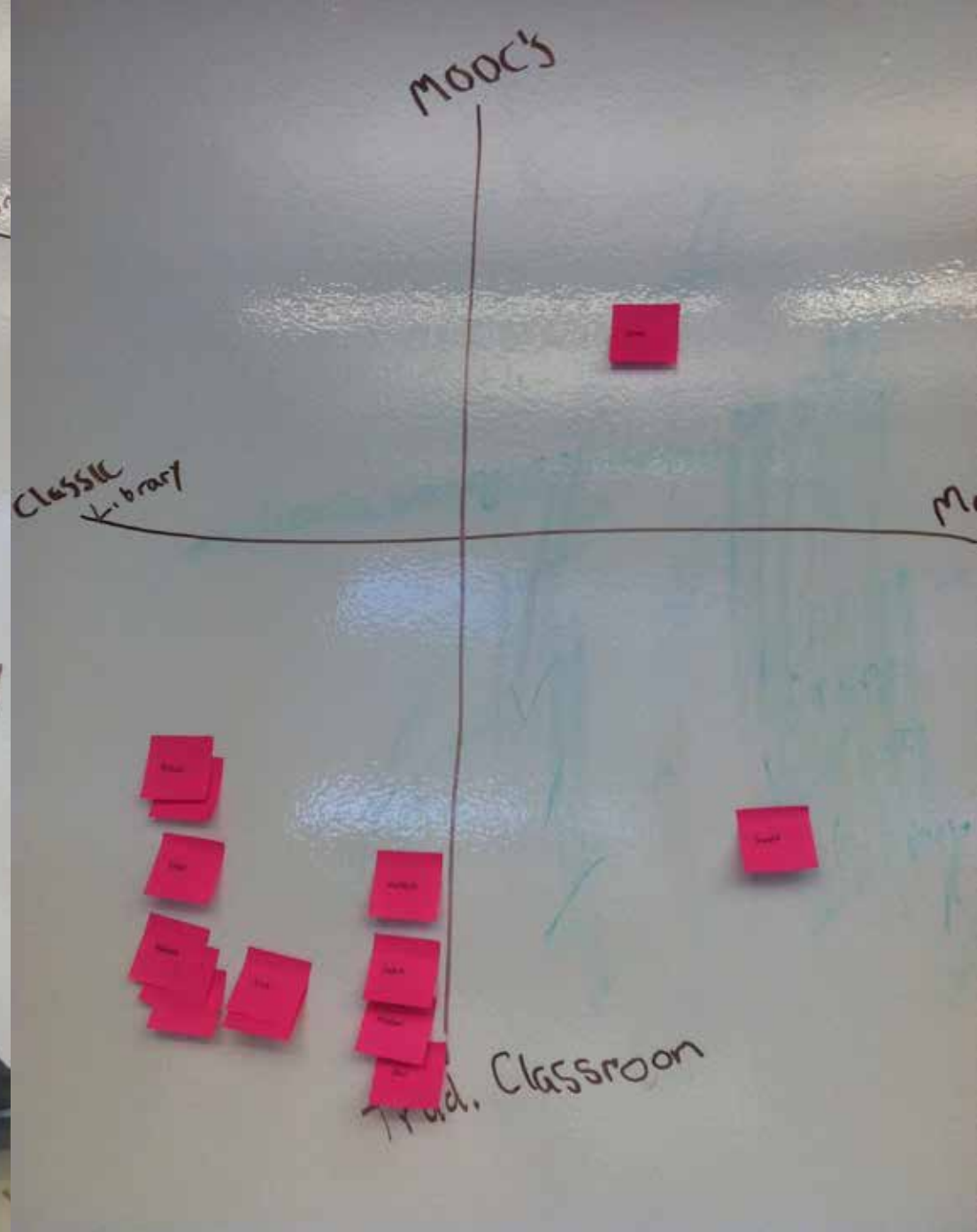
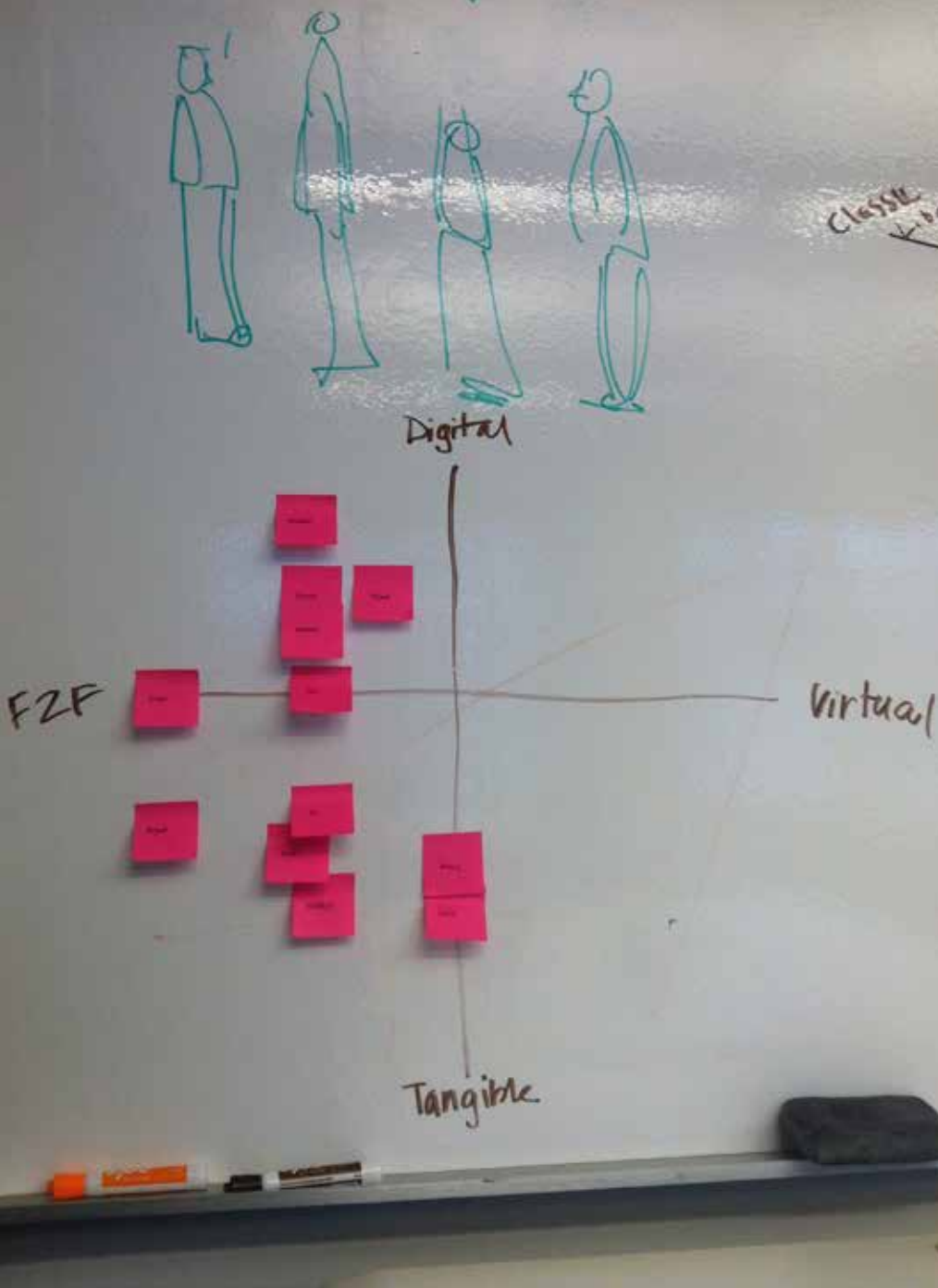
TRAD Publish ↔ New Media

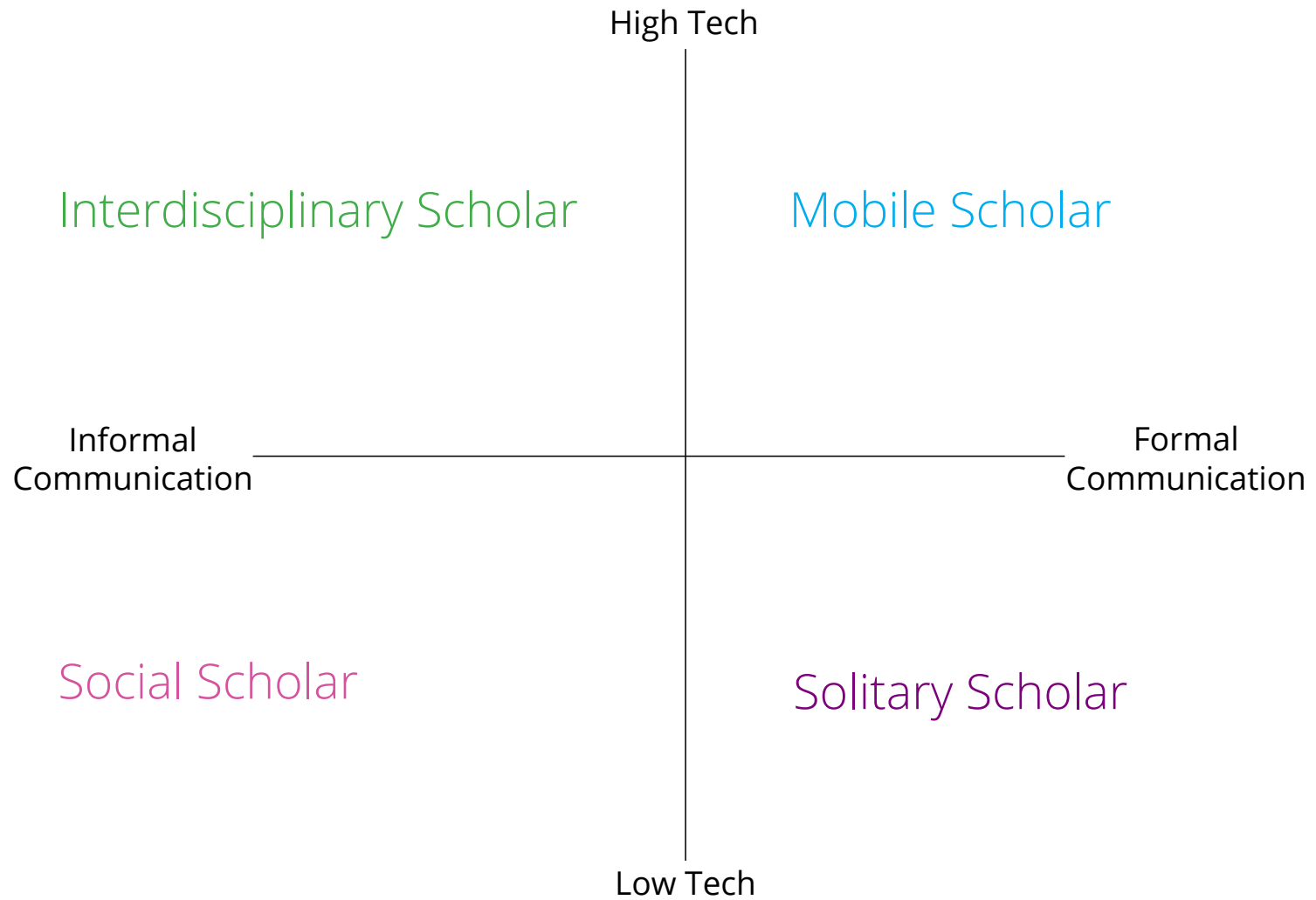
MOOCs ↔ TRAD. CLASSroom

CLASSIC LIB ↔ Mobile

SOLO ↔ MANY People









“Train time alone is 2 hours and 50 minutes, but most of it is work time.”

Name Gary

Age 53

Relationship Status Married/children

Personality Authoritative

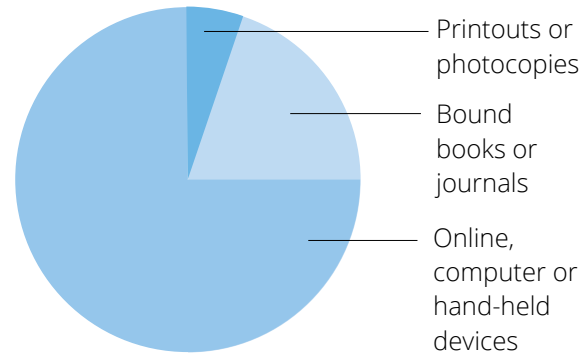
Income \$120K

Occupation Professor of New Testament, writing a book

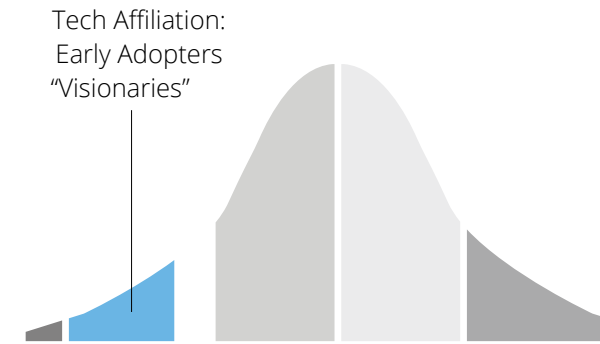
Devices Laptop, Android phone, Kindle

Most Used Feature Voice-to-text app (4-5x/day)

Preferred Reading Format



Technology Adoption Lifecycle¹



Top Sources for Research

ATLA RDB[®]

Online booksellers

Personal library

Thoughts on ATLA Well-versed with ATLA but it is just one of many products

Opinions All apps should be free

Classified Info Use mobile phone when he doesn't feel like getting up to use a computer

Values Seamless integration via cloud, mobility

Experience Goals Quiet block of time in the morning for reading

Product Goals Long battery life, doesn't strain the eyes

End Goals Publish scholarly books

Scenario 2



Gary



Kevin



Scenario

Gary, the “Mobile Scholar,” and Kevin, the “Solitary Scholar,” are out of town visiting family. Both need to have access to online resources to do work. Each found a few hours to sneak away to a coffee shop, but didn’t pack a laptop because it’s in for repair.



Goal

Read for their research; review and add annotations to the text.

Questions

Putting yourself in their shoes, how would you solve the problem? What are you thinking, feeling, and doing? What are your different touch points? Touch points may include people, devices or applications.

The ASR (Analysis Synthesis Research) Room



W MIGHT WE...?

NOW STEP INTO THEIR SHOES THROUGH SCENARIOS

Three scenario cards are displayed on the wall. Each card features a header with a small image, a main image, and several lines of text. The cards are arranged horizontally.



NOW STEP INTO THEIR SHOES THROUGH PERSONAE

A personae card for a male character. It includes a cartoon avatar of a man in a white shirt, a green circular chart, and a bar chart. Below the charts is a block of text.

A personae card for a male character. It includes a cartoon avatar of a man in a dark suit, a blue circular chart, and a bar chart. Below the charts is a block of text.

A personae card for a female character. It includes a cartoon avatar of a woman in a black dress, a red circular chart, and a bar chart. Below the charts is a block of text.

A personae card for a male character. It includes a cartoon avatar of a man in a blue shirt, a blue circular chart, and a bar chart. Below the charts is a block of text.



STEP INTO THEIR SHOES
HIGH SCENARIOS

NOW STEP INTO THEIR SHOES
THROUGH PERSONAE

INTRODUCING
YOUR 15 PARTICIPANTS

Informational posters on the left wall, including one titled "STEP INTO THEIR SHOES HIGH SCENARIOS" and another titled "NOW STEP INTO THEIR SHOES THROUGH PERSONAE".

A large wall display on the right titled "INTRODUCING YOUR 15 PARTICIPANTS", featuring a grid of 15 individual participant profiles. Each profile includes a name, degree (e.g., PhD, B.A.), and a small image.



User Empathy Workshop





"Often theology
Christianity
to be..."

Last Goals

...ing more
...roductivity
... their internal responses
... Groups

NOW STEP INTO THEIR SHOES THROUGH PERSONAE







“Train time alone is 2 hours and 50 minutes, but most of it is work time.”

Name Gary

Age 53

Relationship Status Married/children

Personality Authoritative

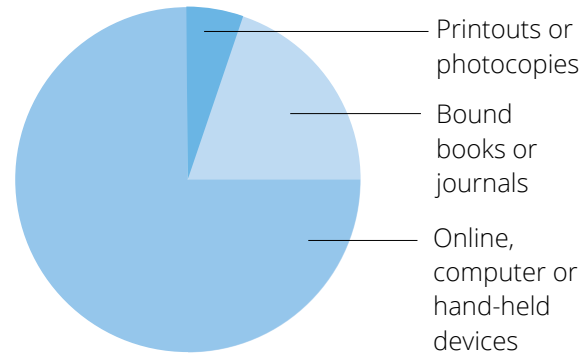
Income \$120K

Occupation Professor of New Testament, writing a book

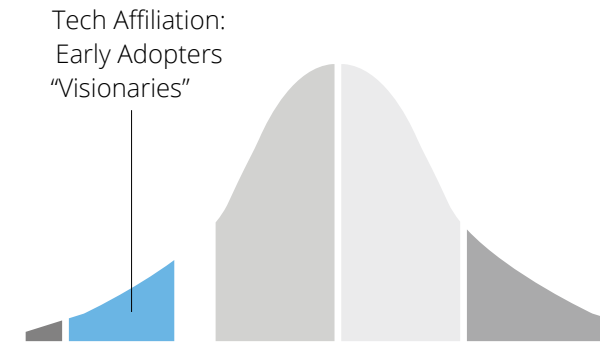
Devices Laptop, Android phone, Kindle

Most Used Feature Voice-to-text app (4-5x/day)

Preferred Reading Format



Technology Adoption Lifecycle¹



Top Sources for Research

ATLA RDB®

Online booksellers

Personal library

Thoughts on ATLA Well-versed with ATLA but it is just one of many products

Opinions All apps should be free

Classified Info Use mobile phone when he doesn't feel like getting up to use a computer

Values Seamless integration via cloud, mobility

Experience Goals Quiet block of time in the morning for reading

Product Goals Long battery life, doesn't strain the eyes

End Goals Publish scholarly books

Summary of Insights

- Non-Traditional Sources of Research
- Convenience: Seamless Access Across Devices
- Efficiency: Access to Full Digital Text
- Limited Access to Non-Western Theological Scholarship

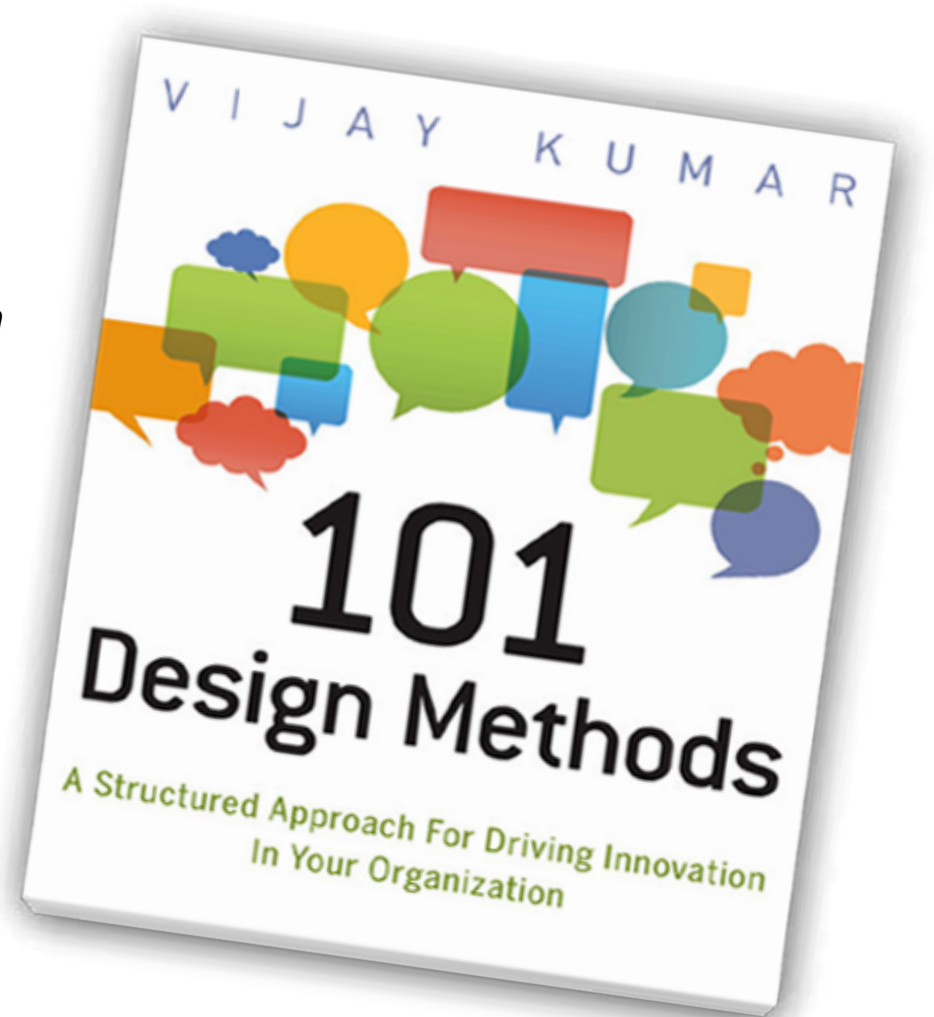
Thank you!

Any questions?

Appendix

Resources

Vijay Kumar, *101 Design Methods: A Structured Approach For Driving Innovation in Your Organization* (Hoboken: John Wiley & Sons, Inc., 2013).



Slide 2: Kathryn Zickuhr, *Tablet Ownership 2013*, Pew Research, June 10, 2013, pewinternet.org/2013/06/10/tablet-ownership-2013/.

Slide 2: Joshua Brustein, *The Nine Slides That Matter From Mary Meeker's State of the Internet*, May 27, 2015, bloomberg.com/news/articles/2015-05-27/the-9-slides-that-matter-from-mary-meeker-s-state-of-the-internet.

Slide 2: Erin Griffith, *Who's winning the consumer cloud storage wars?*, Fortune, November 6, 2014, fortune.com/2014/11/06/dropbox-google-drive-microsoft-onedrive/.

Slide 2: Ben Parr, *Twitter Has 100 Million Monthly Active Users; 50% Log In Every Day* Mashable, October 17, 2011, mashable.com/2011/10/17/twitter-costolo-stats/

Slide 2: Statista, *Number of monthly active Twitter users worldwide from 1st quarter 2010 to 1st quarter 2015 (in millions)*, statista.com/statistics/282087/number-of-monthly-active-twitter-users/.

Slide 12: Chriistian Rohrer, *When to Use Which User-Experience Research Methods*, October 12, 2014, nngroup.com/articles/which-ux-research-methods/.

Slide 12: Ruth Gaba and Kate Ganski, *The CATLA Study: Reading, Researching, and Writing Habits of Master of Divinity*

Students and the Role the Library Plays in These Processes, a Study of Methods and Environment, (Chicago: CATLA, 2011), 131-139.

Slide 41: Christ A. Meinzer and Nancy Merrill, *The Fact Book on Theological Education* (Pittsburgh: The Association of Theological Schools, 2007), 8.

Participant Selection Criteria

Attribute	Distribution
Gender	10 Men/ 5 Women percentage of women chosen is based on The Association of Theological School's report
Age Ranges	6 Millennials/ 5 Generation Xs/ 4 Baby Boomers
Education Level	4 PhD professors/ 9 PhD students/ 1 Masters student/ 1 Undergrad student
Current Occupation	11 Students/ 4 Professors
Devices Used	6 Smart Phones/ 8 Tablets/ 1 Notebook computer/ 9 Laptops computers/ 4 Desktop computers
ATLA Association	6 Experienced Users/ 4 Invited Participants
Work Environment	4 Library/ 2 School Office/ 4 Home/ 3 Split school/home/ 3 Seasonally change locations
Research Focus	Islamic, Buddhist, Candomble

PhD

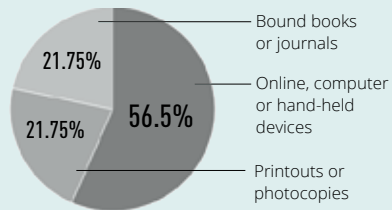
BABY BOOMER

*“Train time alone is 2 hours
and 50 minutes...
but most of it is work time.”*

CURRENT PROJECTS

Collaborating on a book on suffering, based on a series of lectures. Also, working on a book on financial giving according to the Apostle Paul.

PREFERRED READING FORMAT



NOTEWORTHY OBSERVATION

Couldn't get the school to pay for BibleWorks even though he was using it for class. He contacted the software company directly and asked for a free subscription if he recommends it to all of his students. It worked!



This photo illustrates the various digital and analog tools the participant often uses.

DEVICES USED



TOP RATED: SOURCES FOR RESEARCH

ATLA RDB®
LIBRARIANS
ONLINE BOOKSELLERS
PEERS

TOP RATED: SELECTING TEXT FOR RESEARCH

PERSONAL LIBRARY

TOP RATED: NEW PRODUCTS

CITATION MANAGEMENT
COMPREHENSIVE FULL TEXT MINISTRY
FULL TEXT HISTORICAL PERIODICALS/SERIALS

SERVICES USED

ACADEMIC.EDU
AMAZON
BIBLEWORKS
GOOGLE BOOKS
GOOGLE TRANSLATE
GOOGLE VOICE
WIKIPEDIA

B.A.

MILLENNIAL

*“I wish there was better
access (digitally) to more
commentaries.”*

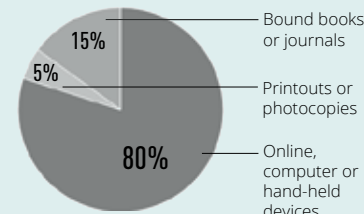
CURRENT PROJECTS

Just received undergraduate degree in Biblical studies. Also a minor in interdisciplinary studies. Lived in a Palestinian refugee camp for 5 months while learning Arabic, going to a theological seminary, and focusing on Egyptian and Israeli studies.

DEVICES USED



PREFERRED READING FORMAT



NOTEWORTHY OBSERVATION

For connecting with classmates, Facebook is preferred over e-mail. Also, a lot of professors have posted video lectures on Facebook.



As opposed to learning on her own how to conduct library research, she received training on library research as part of her orientation.

TOP RATED: SOURCES FOR RESEARCH

ARTICLE DATABASES
ATLA RDB®
BIBLIOGRAPHIES IN COURSE TEXTBOOK OR SYLLABUS
LIBRARY CATALOG
PROFESSORS

TOP RATED: SELECTING TEXT FOR RESEARCH

AVAILABILITY IN SCHOOL LIBRARY
CONSIDERED A PRIMARY SOURCE
PERSONAL LIBRARY
RECOMMENDED BY A PROFESSOR
RECOMMENDED IN COURSE MATERIALS
TEXT IS CITED IN A TRUSTED SOURCE

TOP RATED: NEW PRODUCTS

COMPREHENSIVE FULL TEXT MINISTRY
ONLINE LITERATURE REVIEW OF RELIGION

SERVICES USED

BIBLEWORKS
FACEBOOK
GOOGLE SCHOLAR
LOGOS
YOUTUBE

PROFESSORS VS STUDENTS

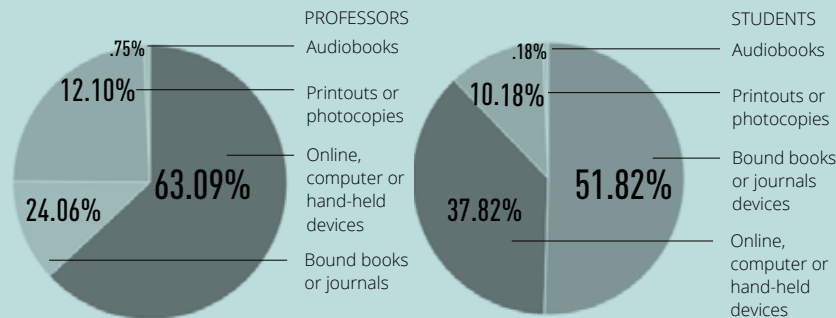
“I think where I run into trouble is with time. Time to research, time to think, time to write.”

— PROFESSOR

“My training when it comes to ATLA is having a dissertation advisor breathing down your neck. I learned to find the right sources or pay the price with red pen on my research paper.”

— STUDENT

PREFERRED READING FORMAT SUMMARY

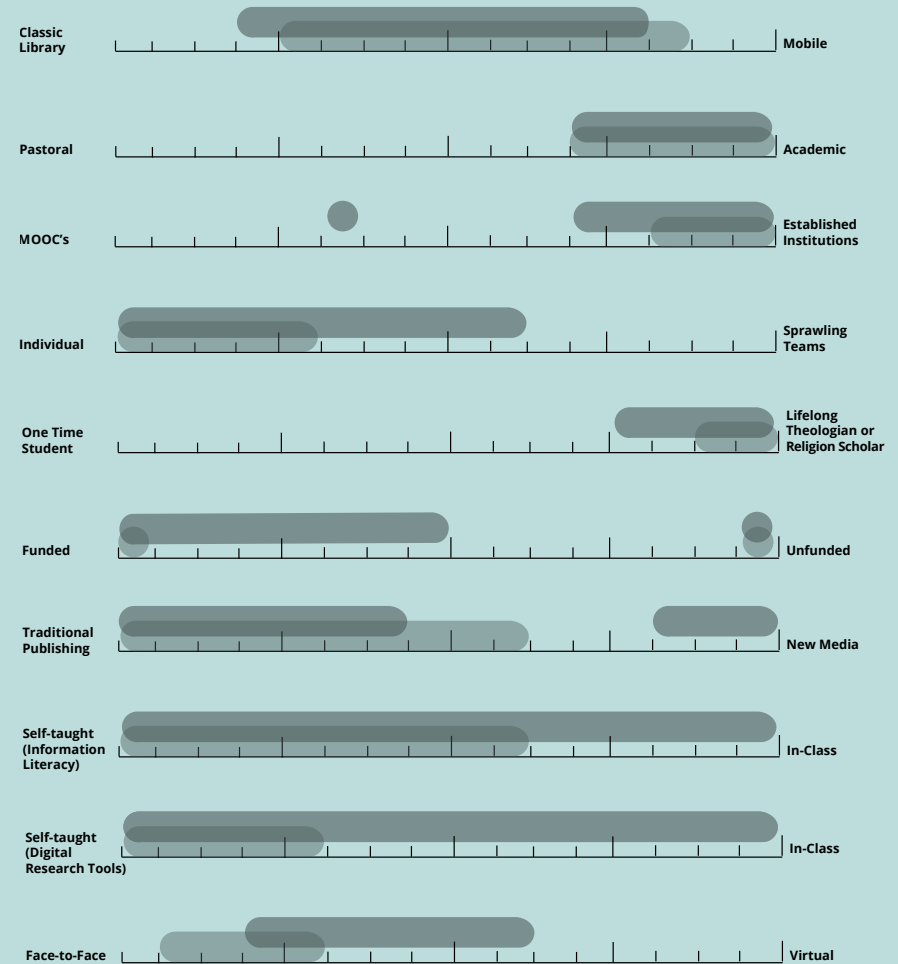


ANALYSIS

- Students value bound books significantly more than professors
- After bound books, students most often use online, computer or hand-held devices
- Professors and students are similar in that they both make minimal use of printouts, photocopies, and audiobooks

SPECTRUM WORKSHEET SUMMARY

● Students
● Professors



ANALYSIS

- In the Face-to-Face vs Virtual spectrum, students have a wider range and lean more toward Virtual than professors
- Students are trying new media
- All participants see themselves as lifelong scholars
- All participants see themselves as academics

Value of Qualitative Research

“This information (quantitative research) didn’t have the detail of the qualitative research needed for an innovation project.”

—Andy Polaine and Lavrans Lovlie

Book: Service Design, From Insights to Implementation