INTRO SLIDE

Alright, well….welcome everyone to my final presentation. It is great to have you all join in and I am looking forward to sharing an overview of the research I've been working on this past year. So let's jump right in.

AGENDA SLIDE

So here's the agenda for the next couple minutes. I will begin with a quick overview of the landscape in which this research resides,
Next I will move into an overview of the research study including the purpose, population, methodology, analysis scheme, etc.
I will then move into my findings, identifying key category and theory
Finally, I will end with a discussion of whats next, looking at implications and future research potential.

SET THE STAGE

In design education, the studio is considered to be both a place and a pedagogy. This duality makes for a somewhat complicated relationship as both elements are very much interwoven.

Because pedagogy is so connected to the studio space, educators tend to be very protective of the studio and the ways the routines of specific meeting times and dedicated unique learning places foster the formation of communities of practice (Logan, 2007; Lave & Wegner, 1991).

Though in the past graphic design education was primarily conducted in physical face-to-face studios, graphic design educators today are beginning to leverage the internet to extend studio learning spaces (Fleischmann, 2014; Peterson et al, 2015; Nottingham, 2014).

Educators who extend their studios cite that because most contemporary graphic design inherently requires technology mediated methods for collaboration, using the internet to extend studio pedagogy could provide students with a "rehearsal of future workplaces.

And so there exists a dichotomy about the spaces and places of the studio. Which brings me into the focus of this study. It has been claimed that because graphic design learning requires a high level of tacit knowledge, best transmitted via the close confines of the studio setting, any

separation of educator and learner in a geographic manner would pose a grave threat to studio pedagogy (Kvan, 2001; Souleles, 2011).

That said, it has also been noted that “overall, studio-based teaching in a traditional design studio is becoming more difficult to sustain” (p. 40) and that “design educators need to rethink pedagogy for the online environment

Though many educators are beginning to call for greater investigation into incorporating the internet into studio pedagogy, there has been a gap in understanding as to how educators are actually using the internet to extend + augment studio pedagogy.

Which brings me into this study….

This purpose of this study was to create a theory about online studio pedagogy in graphic design education to aid future design educators in decision-making about potential course delivery options.

The central research question for the study was: how are graphic design educators who work in brick and mortar institutions using the internet to augment and extend studio pedagogy for learners?

The following sub questions also guided the study:
1. What pedagogical impact do educators perceive come from extending studio pedagogy via the internet?
2. What influence does professional graphic design work experience have on the ways educators use the internet to extend studio pedagogy?
3. How does augmenting the studio via the internet alter the educator experience of studio pedagogy?
4. How are institutions supporting efforts to use the internet to augment and extend studio pedagogy?

HELLO STUDY
GROUNDED THEORY

For this study, I used grounded theory as my research methodology.

Grounded theory is an interpretive process that allows a theory of behavior or practice to emerge out of the specific context from which it had been developed and it is literally "grounded" in and grown out of the data and context itself (Willig, 2001)

It is collectively thought that there are three main versions of grounded theory being practiced: classical, straussian, and finally constructivist (Birks & Mills, 2015). The three variations differ in their views on when literature should be consulted, the data coding process, and the role of the researcher.

I used the third, most recent iteration, constructivist grounded theory. Constructivist grounded theory places a high value on the researcher's own experience of the phenomenon and sees the researcher as being key in the co-construction of the data.

PARTICIPANTS

my participants were all educators who have experience extending the studio via the internet.

I relied on a combination of personal and professional contacts to develop my initial sample of educators. After interacting with the initial round of participants, I recruited the remaining participants via theoretical sampling (Glaser & Strauss, 2008).

Altogether I had 18 participants, recruited from seven countries on four continents. This ensured a diversity of perspectives.

DATA GATHERING

I used solo unstructured interviews, focus groups and memos to gather data.

INTERVIEWS

The purpose of the solo unstructured interviews was to understand how educators construct their motivation for extending studio pedagogy, and how they perceive institutional and learner reaction to their choices. All interviews were conducted via videoconference software. Each participant was interviewed one time with the option of also being part of a focus group. Each interviews was about an hour long and unfolded in a very conversational manner.

FOCUS GROUPS

The purpose of the focus groups was to further understand how educators construct their motivations and to access “taken-for granted assumptions” (Hesse-Biber & Leavy, 2010, p. 167) about studio pedagogy that might be difficult to discern through interviews. It is thought that the synergy focus groups produce has the potential to be greater than any one individual voice. This certainly was my experience as after an initial period where everyone was getting comfortable, the group energy soon took off and being more a facilitator than a direct leader enabled me to observe the interactions taking place, noting language, tone, and energy around each topic discussed. Focus groups too were conducted via videoconference software and about an hour.

MEMO WRITING

Throughout the research process I also engaged in another hallmark of grounded theory, memo writing. Memo writing involves writing short, analytic, informal notes during the data collection and analysis process. memo writing opens the door for new ideas and insights it also creates a traceable map of research process which further grounds theory creation.

CODING

Here’s a basic graph of the data gathering and coding process I used. You can see that in grounded theory, one gathers and analyzes data concurrently.

In keeping with Constructivist Grounded Theory I also used Charmaz’s data coding process which consists of two main phases: initial coding where each word, line or segment receives a name followed by focused coding where the most significant/ frequent codes become synthesized and integrated together. As Charmaz advises, throughout this whole process I was engaged in constant comparison to ensure consistency.

I used NVivo data analysis software to do all coding.

TRUSTWORTHINESS

Essential to any study is its validity so one can be certain that the information gathered progresses beyond a nice story about the phenomenon. As you can see here, I used these four trustworthy factors for qualitative research first outlined by Denzin and Lincoln which are:

credibility, transferability, dependability, and confirmability.

PART TWO

So now that we've address the kind of technical construction of my research let's look a bit more closely at the findings and theory that emerged.

In a grounded theory study, results emerge as codes, themes, categories, and finally theory born from and grounded in participant stories and lived experiences.

The three primary themes developed from the data were: "transposing structures," "transforming roles," and "expatiating perspectives".

THEME ONE

Transposing structures refers to how educators use the internet to transpose traditional place-based elements of the studio into digital, networked channels. Participants perceived these structural shifts resulted in increased access to learning materials, including the instructor, and increased accommodation for learners themselves.

THEME TWO

The second theme, transforming roles, refers to how participants use the internet to flatten traditional hierarchy, moving themselves out of the obvious center of the studio. Participants perceived this movement results in a role shift, prompting learners to take greater initiative in pursuing those topics deemed most necessary to learn for any given project and prompting learners to join together in peer-to-peer learning.

THEME THREE

The third theme, expatiating perspectives, refers to the process of participants using the internet to welcome in outside voices by engaging in collaborative projects. Participants perceived this perspective shift resulted in learners viewing themselves as being part of a larger worldwide graphic design network.

CORE CATEGORY: TRAVERSING

A key aspect of theory development within grounded theory is identifying a core category. The core category acts as a way to connect ideas, concepts, and reflections in a unified framework. Integrating the various emergent threads that appear during data analysis, the core category should be traceable back through the themes generated and the raw data trail.

Though I was hopeful I could find a magical single element or motivation to tie my themes together and in so doing form my theory, It became apparent that rather than a single motivation, there is a continuum that describes how educators are using the internet to extend studio pedagogy.

In keeping with this active idea, the core category I constructed from data analysis is "traversing."

ADD DEFINITION OF TRAVERSING

REPLICATION COLLABORATION CONTINUUM

This idea of traversing formed the basis of the Replication-Collaboration Continuum which is the theoretical framework that emerged in response to my main research question.

At one terminal are practices using the internet for replication potential.

In speaking of creating websites for their courses, inviting learners to create blogs, and using synchronous online chat tools, participants all noted that their choice to use the internet to augment and extend studio pedagogy began with them traversing physical and digital spaces. Transposing structures represents a replication of studio pedagogy and acts as a gateway to the Replication-Collaboration Continuum.

In the middle are practices that open learners up to new identities. This aligns with traversing roles. In speaking of decentralizing themselves as the visible leader participants hope to encourage learner agency. This occurs in a variety of ways, including: through the critique process, through empowering learners with the skills to evaluate resources so that they could learn on their own, and through opening space for greater peer-to-peer learning to occur.

Traversing roles can only occur if one has created a studio replication framework through traversing structures. Traversing roles forms the midpoint of the Replication-Collaboration

Continuum. As in the traverse of transposing structures, some participants chose to complete their journey of using the internet to extend studio pedagogy in transforming roles.

At the other terminal are practices using the internet as a means to open up space for connection and collaboration. This aligns with traversing perspectives. This again occurs in a variety of ways such as welcoming outside experts into the studio, using social media or other open means to welcome the general public into the studio, or engaging in distant collaboration. Participants noted that traversing perspectives requires an acceptance of high levels of ambiguity, because making this traverse involves so many inputs and actors outside of one's control.

Most educators move in a fluid manner within the spectrum, fluctuating between poles depending on the task at hand, and the given group of learners.

To further ground the continuum and ensure it was a good fit to all parts of the study, I mapped each of the research subquestions to it.

My interpretation of how participants addressed the quality of each relationship during interviews and focus groups determined line width. For example, participants who spoke in depth about traversing perspectives often also cited professional work experience as impetus in doing this, or as something that influenced the tools they used to execute this traverse. Through their tone and word choice, it became clear that their professional work experience provided a compelling impetus for them in extending their studio spaces. Professional work experience then was heavily tied to traversing perspectives, reflecting a high connection and flow between these elements. In contrast, through their tone and word choice, it became clear that institutional support was something that participants acknowledged had little impact, and often was not the impetus that caused them to traverse structures, roles, or perspectives. These lines are thin reflecting this low connection.

IMPLICATIONS

Three main implications for design education arose from this study. These are: acknowledging technology, positioning learners, and integrating curriculum/program orientation.

1. ACKNOWLEDGING TECHNOLOGY

A renewed call to examine how technology impacts pedagogical practices by the educator, because the educator is responsible for demystifying technology present in studio pedagogy. Acknowledging the implicit bias inherent in all interface design, and acknowledging the relationship with technology that all participants have within the studio.

Assess the use of both networked and non-networked technology used in studio pedagogy.

2. POSITIONING LEARNERS

A renewed evaluation of the position and role of learners within the studio learning process.

Empower learners to become framers of investigation rather than passive recipients

3. INTEGRATING CURRICULUM/PROGRAM ORIENTATION

A call for greater awareness of the hybrid, physical-digital world into the design curriculum, and overall program orientation.

Embrace greater “platform agnostic” thinking and program design

FURTHER RESEARCH

1. repeating this study with the focus on learners as opposed to educators.

2. repeating this study with the focus exclusively on the experience of adjunct or sessional educators.

3. exploring studio pedagogy that has been extended using the internet from a socio-technical perspective, looking specifically at how the technology itself influences communication, tasks enacted, and overall structure of studio pedagogy.

4. repeating this study in the context of another design discipline, such as industrial or interior design. These disciplines all share the commonality of studio pedagogy being their primary teaching and learning methodology.

5. enacting a comparison study of the Replication-Collaboration Continuum to other existing technology learning models such as SAMR (Puentedura, 2014) or TPACK (Koehler & Mishra, 2009).

CONCLUSION

Though the emergence of computers and the resulting widespread change from design being a physical practice to being an increasingly digital practice happened almost forty years ago, design education continues to exist in a liminal space. This liminal space bridges a strong past tradition with an ever-shifting future. Given the trajectory of the digitization of society in general, it is expected to see greater implementation of digital technology in all sectors of education, including the design studio space (Fleischmann, 2015). Though there have been many calls for more research around online studio teaching and learning practices, there has been scant research done in this area.

This study endeavored to reduce this knowledge gap. The theory that was developed from this study provides a snapshot of a system in transition, a signpost of practices that may be indicative of the future of studio pedagogy and design education. Jones (1970) posits that the effect of designing is to “initiate change in man-made things” (p. 4). As this change always has a future focus, designers must be comfortable working in liminal spaces, often on the edge of tradition or commonly accepted practices. This study documents the experience of just such a group of design educators, noting how they are using the internet to extend studio pedagogy from something traditionally rooted in a specific place and space, to one that is increasingly decentralized.

And with that…thank you so much and I welcome your questions!