ADDING
DIMENSION

Carnegie Mellon
Design

About this document

A thesis submitted to the School of Design,
Carnegie Mellon University, for the degree of
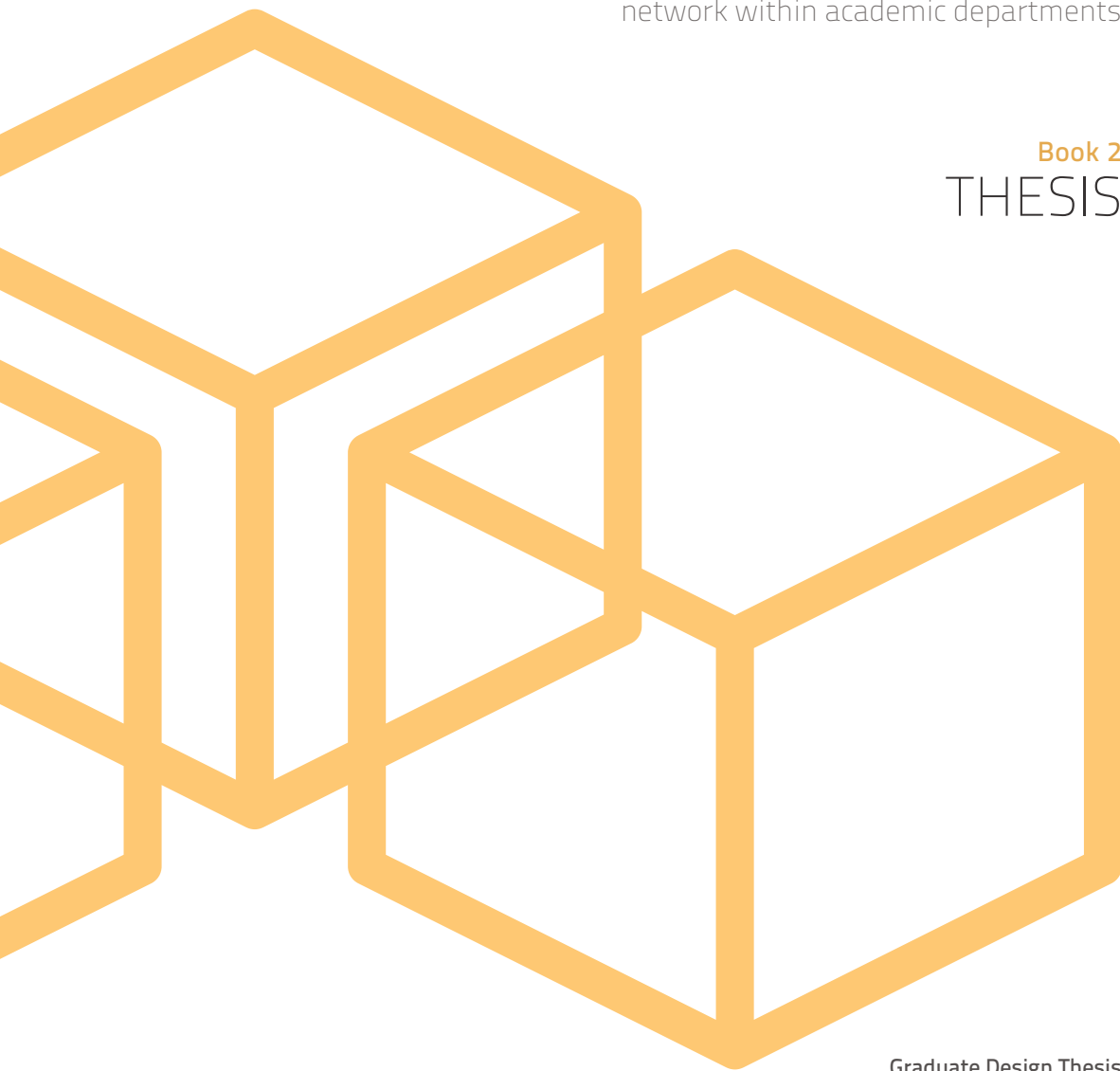Master of Design in Interaction Design

ADDING DIMENSION

Ideas for building meaningful & broader social network within academic departments

Carnegie Mellon
Design

Abstract

College departments are constantly changing communities. Whether its new students entering the department or seniors who are graduating and moving onto their next phase of life. This constant movement makes the experience of building a community difficult, and makes the process of establishing social networks complicated and inefficient.

College departments should look to encourage and help build meaningful relationship amongst peers while they are part of the community, in order to create lasting bonds, diverse social networks, and potential future resources. This project aims to provide ideas through the means of a toolkit, that departments can use to create community.

Table of Contents

Ideas to help build stronger broader social networks in academic departments

Acknowledgments

First and foremost I would like to express my many thanks to my adviser Professor John Zimmerman, for his guidance, knowledge, patience and good humor throughout this entire process. Similarly I would like to thank Professors Mark Baskinger and Dan Boyarski for being wonderful voices of advice and support.

To my fellow grad students, thank you for providing a fun, challenging environment. A special thanks to Tiago Carvalho, Aliya Baptista, Kelly Nash, Jenny Shirey and Gretchen Pinard for being voices of sanity and common sense.

To all those who contributed to the completion of the this project, through participating in interviews, or activities thank you for your time and effort.

Lastly to my family, a warm and wholehearted thank you, for your unwavering support and encouragement. For giving me the opportunity to pursue this dream, and for believing that it was a dream worth pursuing.

In Introduction

Introduction

People are social creatures by nature. There is an undeniable desire to connect to the individuals or groups that make up the environments of our day to day lives. It is this basic desire that drives the formation of many of the communities that people actively participate in. They serve as starting points for establishing more in depth connections to individuals. Both communities and connections can eventually become intricately woven into the fabric of individuals identities. Individuals can turn to these networks of people for support, for seeking and growing knowledge, for distraction and enjoyment and for basic self expression. Similarly they can turn to the broader communities for creating meaning in their lives and for constructing identity.

Communities and the connections they provide bring immense wealth to the lives of people. However, communities change and shift over time, often influenced by the persons stage or phase in life. During any given lifetime, a person will transition between communities, and as a result, these specific individual connections will likely undergo changes; making these connections strengthen, fade or remain the same. As a result, communities are always struggling to make their members feel connected, and to provide methods to keep people engaged even after they have moved on. An example of this can be found in universities.

In

Universities are comprised of a diverse variety of smaller communities, that share an underlining problem; their population is in constant transition. While there are segments of the population that have less turnaround such as faculty and staff, most if not the majority of the community is part of a recurring flow of students that begin and end their academic careers within the institution. After which, they leave the community and move on to their next phase in life. The typical cycle of a student in a traditional American residential university is made up four years of academic study, within one department. While there are options for students to not declare a major or department affiliations until after the completion of their first year, most students are usually already aligned to a field of study when they enter the university. This predefined amount of time, set educational structure and department affiliation, are all key factors in understanding how students assimilate and embrace their new environments.

Students in general are likely to engage with those they share commonalities with. As a result the very institution ends up leveraging that behavior as much as possible. This is done by fostering community-building exercises that work within the natural constraints that occur in university communities. While the institution will likely encourage students to go beyond their own peer groups, it is likely that most students will build cohort relationships, based on the exposure to peers in their direct field of study and college year. What results, is a very fragmented approach to building community. Students will

naturally build very tightly knit networks which are aligned under two of the key factors of university life; their educational structure or level year and their field of study. This is lastly reinforced by the last factor, the amount of time individuals spend with the institution.

From an academic department standpoint, this fragmentation in community is sometimes inevitable. The curriculum usually ends up enforcing the year boundaries by placing similar year students in the same core requirement classes, and in some cases sharing the same physical spaces. Another interesting component of the department/ student relationship, is that the department is the organization that ends up interacting most with the student, during their time in school. The department sees students through the admissions process all the way through graduation. Ultimately they are also the prime beneficiary of any accolades students receive during their tenure with the department and after.

While academic departments may be singular entities, the fragmentation in its peer groups and subsequent cohort relationships, ends up creating a very segmented community [Fig. 1]. The horizontal breadth of a students network within their department and year, can be quiet extensive. The same can not be said about a vertical cross section of those same community members. Very few students add dimension to their networks by crossing those year boundaries and establishing cohort relationships in these alternative peer groups. Segmentation

in peer groups also manages to create a very limited institutional memory. Since each year is almost working in a vacuum, and no one year has knowledge of the other. This current departmental structure provides the opportunity to reconsider how the community interacts, and it allows for the exploration of potential benefits that can come form a more integrated and dimensional departmental community.

While a departments main goal may be the education and training of its students to become successful practitioners, they are also focused on continuously developing the standing of the department within the university and their educational field. The success of the academic program dictates everything from how many students apply each subsequent year, to how the university chooses to fund the department. More importantly if the academic department can be seen as a rich resource for its alumni and students, its survival is all but guaranteed. While this type of success may be achieved as
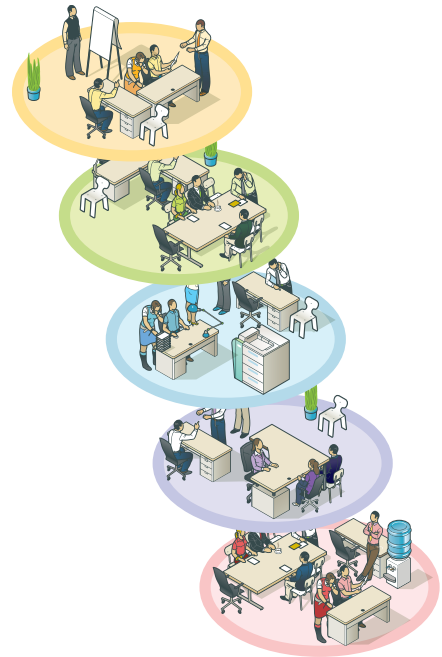
[Fig. 1]

Segmentation of Peers

Students build social networks from the environment they inhabit. This usually means students develop some of their strongest bonds with fellow classmates and more specifically people within their own year and their own major. This isolation occurs naturally.

In

Ideas to help build stronger broader social networks in academic departments

a result of an intense academic program, a significant piece can come from the community itself. If the students develop broader networks within their departments, they are likely to increase their resource pool, which is beneficial to students as they carry out their studies. It can also be incredibly important after they graduate. By keeping those links to community members strong, even after they have left the university, the department can allow current members to experience and build a broader, richer social network. One that can eventually lead to job opportunities and connections for the students, and wonderful educational and developmental resources for the department.

This project is aimed at finding ways of building community within departments, with a focus on developing cross-cohort relationships. It will take a look at successful methods of establishing and creating community through activities, and will discuss the theory that supports some of these community exercises. It will also discuss the various methods used by other education organizations that tackle similar problems, and will showcase some exploratory research and process that lead to the application of these methods to the department structure. More importantly there is a large component of this project that looks to discuss how utilizing positive or successful examples of processes can be used as tools to design for other instances or situations. It hopes to look at how new ideas can come from a designing not only for a problem, but rather designing within a desired outcomes exemplified by other solutions or scenarios.

Theory & Related Work

Theory & Related Work

There are multiple areas of research that discuss concepts which are in line with the ideas of building community, developing meaningful relationship among peers, and universities as unique social systems. In the following pages there is a breakout of the various areas of research that lend some knowledge to the project.

Identity Theory

Identity theory, is at the core of much of the literature found on college communities and student development. Identity development is understood to be the way in which an individual comes to understand, accept and organize their personal experiences with their context or environment. It is understood that with each new experience, the self can begin to craft a belief system around that establish norm. Throughout ones lifetime identity will be created based on the acceptance of those norms. More importantly if challenged, these norms and ultimately an individuals identity, will change as a result of the shift that naturally occurs in ones context and environmental influences. That being said, there are numerous lenses through which to look at the definition and act of creating identity in context of student development. These numerous lenses include psychology, sociology, social psychology, and postmodernism (Torres, Jones & Renn, 2009). Each of these branches accounts for unique and in some cases intersecting pieces of knowledge about how to advance students development during the college years. In their comprehensive study, Torres, Jones & Renn place a strong emphasis on getting student affairs practitioners

to understand how 'socially constructed identities" are key to developing rich learning and developmental experiences for students. Since identity construction is the direct result of influence from the environment and more specifically on the interaction between the individual and social groups, then exposure to newer elements within this context can lead to accepting new type of norms.

Identity theory: Psychology

Psychological perspectives on identity theory focus heavily on looking at the specific stages of personal identity development. One of these crucial phases, which is pertinent to the study of college student development is the adolescence stage. This stage is often used to describe the phase that most college students find themselves in. Interestingly Belk (1988) while studying identity through a possessions lens, points to this phase in life as one of identity crisis (c.f Erickson 1959) that triggers adolescents to accumulate objects in order to find something that can be adopted as part of the identity. This crisis of identity phase leads to other types of exploration; primarily in the area of social norms. It is through exposure, and the absence of parental or overly strong external influences, that a person begins to build an individual identity. As students expose themselves to these social groups and situations, new norms will be explored, and students begin to find, adjust (Swenson, Nordstrom & Hiester, 2008) and build a version of themselves in the world. Through this psychology perspective, we are also able to identify inherit characteristic that are influential in the process of crafting identity. A persons race or gender can begin to play particularly powerful roles in the process of building identity in these developmental stages.

Identity theory: Sociology

Sociology is a good lens for understanding the individual in terms of the social context. Higher education institutions create a very specific context for the development of situated 'felt" identities. These embodied characteristics play active roles in the life of the student while at school, but have the potential to last past the college years to become permanent additions to an individuals identity (Kaufman & Feldman, 2004 c.f Feldman & Newcomb, 1969). Things that can be described as traits become descriptive elements on ones identity , such as intelligence or artistic capabilities, and roles like those exemplified by affiliations to a student organization or ones own field of study (music major, soccer team member). These 'felt" identities are important, because it begins to suggest that if a student is potentially exposed to a social group with a strong identify, the student as a result of their participation within the group, can then adopt the organizational identity and make it their own. This can be incredibly beneficial in creating lasting connections between the individual and the social group or organization. Some additionally interesting pieces of knowledge about an individuals intersection with a social setting, can be seen by Astin's (1999) work on student involvement. His definition or explorations of what involvement can mean, cover some key components of what it means to be an individual actively participating or acting on a goal within a social context. By some definitions, an individual is involved as a result of physically and psychologically investing energy into objects. Objects which can be generalized to a specific experience like life as a student, or more targeted objects like completing a specific task.

Th

Theory

Adding Dimension:

Identity theory: Social Psychology

Identity theory in social psychology aims to reason why individuals internalize and end up adopting group identities. This perspective is particularly valuable in terms of community building, because it begins to explain why and how people belong to social groups. By adopting a group identity you are essentially developing a sense of belonging to something, this sense of belonging manifests itself in the direct participation of the individual with their social context. This participation not only leads to identity construction but raise satisfaction levels within the individual (Arboleda, Wang, Shelley & Whalen, 2003). This desire to seek acceptance form peers combines both psychology and sociology approaches. The psychology process of encountering and accepting social norms and building a belief system around them and the sociology process of interacting with ones social context in order to seek validation for those choices.

Another important piece from the social physiologist perceptive is the introduction of the concept of emerging adulthood. Emerging adulthood has been identified as a transitional phase, that is particularly important, as it acts as a buffer between the careless and free aspects of adolescence to the more responsibility laden time of adulthood. This is significant because it allows to place college age students under a category in which they are separated from either phase(Torres, Jones & Renn, 2009 c.f Arnett, 2004). This span of time in individuals lives, proves to be the testing ground for many life choices. It manages to crafts individual identities not only through methods self exploration in context, but also through an active strategizing approach needed to address the challenges faced during this specific transitional time (Roe

Th

Ideas to help build stronger broader social networks in academic departments

Clark, 2005). This is relevant in the college years precisely because of emerging adulthood and the development of identity that happens in this period. Since students are beginning to live a less dependent life, they begin creating an image of whom they aspire to be. These coping strategies begin to reflect back into the individuals social context, and more importantly, can become permanent methods or markers of an individuals identity. This period of time allows individuals to test the boundaries of decision making and identity until they have to move into adulthood and have to solidify some aspects of their identity and core value structures, much of which comes from those earlier strategies in cooing with change .

Identity theory: Human & Developmental Ecology

From the human and developmental ecology side we can see a strong focus on the how identities play out within broader societal environments and how the environment in turn reflects those identities as influences on its members (Torres, Jones & Renn, 2010 and Arboleda, Wang, Shelley & Whalen, 2003). Cultural attitudes and challenges to those attitudes are observed through the ecology lens. More specifically how some of these cultural or societal forces play out on the individual. The changing perceptions of what individuals understand and accept as normal, become key markers in characteristic that get adopted into their identities. The key aspects of this research are based on getting to pinpoint what kind of ideal type of environment is likely to result in identity creation and meaning. While simultaneously avoiding common pitfalls that arise from the nature of social groupings and their environment such as oppression of some of its members . This is significant in the college perspective

because the university ecology is unique in the type of influences it exerts on students. This research is also significant in that it also points to how to deal with diversity in social grouping in order to get the most broad set of norms established within ones identity. Most of the literature suggest that creating a varied environment, validating it as a norm and exposing the individual to it, can have significant effects in the creation of identity. If this is the case, then by establishing a sense of diversity and intersectionality within all members of a designated community organization will likely achieve some of the this cross cohort interaction that can be meaningful to the student long after they leave school. This can also produce norms which can be significant in a persons overall development. Simple capabilities like being able to socialize with people outside of your direct peer network, can be very powerful when students transition into the working world and are able to have the skills to communicate and deal with a varying set of peers weather its superiors or direct peers. As well as racially and socioeconomically diverse social settings.

Lastly we can say that these research theories are key to understanding how people perceive, understand and build identity. They clarify how connections to social environment and external forces play active roles in the various stages of the identity development process.
'Identity links both the past and the present and the social world into a narrative that makes sense, It embodies both change and continuity."
(Josselson, 1996)

Psychological Well-Being
There is a significant amount of literature that extends identity research and

moves in to the space of how individuals find a balance between themselves and their environments. Much of this work resides primarily within psychology. The most relevant is focused of psychological well being or PWB in college students. PWB tries to identify which characteristics or perceptions lead to a positive existence. It goes beyond simply qualifying people into particular mood states such as happy or satisfied, and tries to find which conditions in a persons life bring forth a overall state of well being, not only emotional but physical as well (c.f Ryff,1989). The PWB concept develops a model that encompasses six dimensions : autonomous functioning and decision making, mastery of the individuals environment, seeking opportunities that lead to personal growth, creating and nurturing relations with others, having a sense of purpose in life, and accepting and providing positive reinforcement about ones self.

While the focus of the research on Psychological Well-Being of college students is aimed at discovering the things that could potentially cause individuals to struggle or dropout of college. Some research clearly points to the effects of certain non-classroom experience that affect all dimensions of Psychological Well-Being. Primary among them is the formation of quality peer relationships or conversely having adverse reactions with peers in social group settings (Bowman, 2010). In the Bowman study, it is suggested that in order to develop programs for first year student adjustment and well-being, administrators need to provide instances of social interaction that go beyond simple coexistence in a shared space, such as dormitories. Efforts should be made to explore issues within group dynamics and conflict resolution. By doing so you increase students interpersonal relationship skills and ultimately their well being. This is significant in that its actively asking peers in social group setting to interact

and then to address issues that arise from said interactions. Some of this work also goes back into the identity development work, that suggests that identity is crafted from exposure to socially shared experiences, and that accepting some of these new social norms is key to building an identity. What Bowman is stating through his work is that in order to achieve a status of Psychological well-being, students have to be prepared to deal with the instances of social interaction that may enforce or gravely deviate from their own value structure. Both pieces of theory feed of each other as one suggest that the more varied type of exposure you provide to students during their developmental stage, the more likely they are to embrace multiple characteristic into their identity that will bring forth a greater tolerance to their environmental assimilation. This broad acceptance is likely to directly affect the dimensions of psychological well-being. By allowing students to master their environments, seek new opportunities for personal growth as they expand their horizons and positively raise their self esteem. By accepting and finding control over their feelings about themselves, they are able to find belonging and embrace new communities.

There is an abundance of material on college students and their development within the academic environment. While the identity material serves a very strong foundation to how to understand both the orientation parts of the project as well as individuals behaviors in community settings, it is important to acknowledge the breath of topics that exist for this kind of project, all of which cannot be covered here.

Initial Framing **Fr**

Initial Framing

This project began by looking at ways in which technology could begin to aid freshmen year students in the transition into college life. More specifically the focus was on figuring out if the use of their media - movies, books and music- could be leveraged with technology to help students find and build connections to peers. Assuming that students have built some form of attachment to their possession, that emotional connection to their belongings would begin to play a role in how they perceive themselves and ultimately others. The project was trying to conceptualize a tool that would identify connections amongst peoples belongings, and as a result prompt people to explore those similarities in shared possessions.

By creating these instances or triggers for interaction, one could speculate that the commonalities identified amongst peers could lead to more in depth interactions. These could then lead to relationships and potential meaningful friendships. The motivation for the project was based on identifying a key problem area in students lives.

When looking at the university population, its easy to see that some of the most challenging times a student faces, come from the first year experience. The first year of college is comprised of a series of both emotional and academic challenges. For starters, students have

Ideas to help build stronger broader social networks in academic departments

to adjust to new teaching methodologies, and most likely have to encounter some quick learning curves to new material that they will be learning. This coupled with the experience of adapting to a new environment and new peer group can lead to multiple triggers for stress and anxiety. Universities are very well aware of this assimilation and transition process, and have created support systems that deal with the issues. However the project was hoping to target the way in which students could take ownership of some of these transitional experiences and further explore their connections to their new peer group.

In the initial development process of the project, the focus was on getting a better sense of how freshmen year students established peer relationships. A strong emphasis was being placed on how their possessions may have played a role in their assimilation process, and if their possession - as markers of identity - could be utilized to help them connect with other peers. In the following exploratory research section, some of these questions begin to get addressed through a series of activities designed to collect information about freshman year students, their possessions and their social interaction with peers.

Ex1 Exploratory Phase 1

Exploratory Phase 1

Method

Three distinct activities where planned in order to gather more information about freshman year student possession; their methods of interacting with peers and their use of technology for those actions. The activities where carried our with students attending a private residential research university based in the eastern United States. The first activity was a series of one on one interviews with twelve participants. Following each interview, students provided a tour of their dorm room. The second activity consisted of a digital cultural probe. Each day five participants would record activities based on a set of guidelines provided. They would report this daily information via e-mail for two distinct times of day, for a period of a five days. The last activity consisted of a participatory exercise with seven freshman year students in the dormitory. The goal of this exercise was to get them to socially speak about their experience as first years and the way they built and established relationship with peers.

The participants for the interviews were recruited via posters placed throughout campus [Appendix. 1]. The posters communicated that only freshmen year students who were older than eighteen years of age could be eligible to apply. They were also recruited through two freshman classroom visits, were they were presented with the

Ex1

Exploratory 1

Adding Dimension:

premise of the project and way to sign up to become participants. After the recruitment process was completed, e-mail communication was established and time and dates were set for the interviews. The remaining activities utilized participants from the interview pool who agreed to the additional activities. All participant were remunerated for their participation with a digital music gift card. An additional gift card was provided to students who participated in more than one activity. For the participatory exercise compensation was given through the purchase of a meal during the time of the activity.

Interviews & dorm room tours

The interviews were conducted with each participant in their respective dorm room. Each interview started with an introduction to the project, and the goal of the research in general. Prior to starting any of the formal questions, some non-interview questions were asked to get the participant relaxed and engaged with the interviewer. The interview consisted of thirty-two **[Appendix 2]** questions. Some had simple yes no answers while other had more robust long answers. The questions were broken up into three categories; questions about possessions; questions about identity and questions about their physical space.

The possession questions were initially focused on a unique type of personal set of items. In the initial positioning argument, it was discussed that media could be a key type of possession that could clearly manifest personality traits of it owner. Therefore the initial

Ex1

Exploratory 1

interview questions fell on what kind of media - books music or movies - the student had brought with them to school; what format this media was in and why they had chosen to bring these items with them. Lastly in the possession section, students were asked to reveal the most significant possession they had brought with them to school, why it was so meaningful and weather or not this possession was kept public or private within their dorm space.

The identity section of the interview consisted of questions about the perception of meaning and connection of the student to their possessions. Questions about wether they though that possessions could convey personality or identity were asked, as well as trying to define or clarify what those labels meant to participants. They were asked to comment on what they thought their different media said about them, and if their possessions would in fact be good indicators of their own personalities. Within the identity section there was also a set of questions about how they established connections with others and how influential others possessions could be in the process of getting to know someone. Lastly they were asked about how they curated their personal space, and if any attention was paid in showcasing any specific object. This last question served as a transition into the last section the interview, which specifically focused on their dormitory space. Questions asked were aimed at learning what kind of choices affected their decision to bring certain items to school, as well as what they did not bring as a result of the limitation of space. They were asked to discuss

any coordination efforts with roommates that resulted in a shared possession as well as how involved they were in their own packing process.

This section concluded by asking them what kind of effort had been made to personalize the space and identify if this was a priority for them. The very last step of the interviews was the tour of the dorm room. The purpose of the tour was to get participants to speak about the space freely. This think-aloud exercise was used to find out if any unique object that had not be considered or bought up in the interview might actually surface. The interviewer also took this opportunity to ask about objects that had been prominent during the interview questions. The tours of the rooms were very basic, as the average dorm room is quite small to begin with [Fig. 2]. During this time, additional questions about the use of the space were asked. In particular weather or not peers utilized the space as a meeting or hanging out point. Some of these questions were asked as direct result of answers or comments made

[Fig. 2]

Student Dorm Rooms

Sample of dorm room surveyed. Activity consisted of 30 Minute Interviews and 5-10 minute tour of their dorm room space.

Ex1

Ideas to help build stronger broader social networks in academic departments

by the participant throughout the session, and where not routinely asked to all participants.

Cultural Probe

The cultural probes began once a participant had gone through the interview process, and once they subsequently agreed to participate in the cultural probe exercise. The probe lasted for five consecutive days and required that participants log information about those particular days. The cultural probe consisted of documenting three social interactions that occurred during the early part of the day and the latter part of the day. The schedule was fairly flexible and allowed participants to complete the response at their convenience. The basic frame work of the response was as follows.

Participants were asked to record a total of six unique social interactions each day. Participant responses had to detail with whom the person was interacting; where the interaction had occurred; what the subject matter of the interaction was and what had been the initial

Ex1

Exploratory 1

trigger that prompted the interaction. If the interaction constituted a large group of people, the participant was asked to list all those involved. They were also asked what the current relationship status was to that person they had interacted with, and if the had any aspirational type of relationship with said person. Lastly they were asked to comment on any possession that might have caught their attention throughout the day. Participants were asked to e-mail the researcher twice a day with the responses to these questions. In order to keep the study participants focused on remembering the activity, the researcher sent out two outgoing SMS messages during the two key times of the day [Fig. 3], to serve as a reminder for participants to submit their reports. The researcher also provided the participants with an e-mail template they could easily fill in as they generated their reports.

Participatory exercise

This last activity was designed to help bring a communal vision to the first year experience. After having conducted the interviews and

[Fig. 3.1]
Post-it note Exercise

Collecting ideas and thoughts on the current and ideal dorm experience.

Ex1

Exploratory 1

Ideas to help build stronger broader social networks in academic departments

the cultural probe, the participatory exercise was a great way to get participants to open up about how their assimilation process to college life had been and more importantly what key factors had played important roles in that assimilation process. The activity consisted of two large white sheets of paper with graphic prompts [Fig. 3.1].

Participants were asked to take post-it notes and write down as a group, the things that they had enjoyed so far of their college and dorm experience, as well as identifying the things they struggled with. The sheets also contained space to comment about the actual physical space they inhabit. Participants were asked to contribute ideas about what they thought the ideal state of the dorm experience should be. It also asked participants to convey any feelings that had emerged from living in the dorms; If it had let them achieve any specific goal and what they wish they could do going forth. Most of these questions were aimed at seeing how they perceived themselves in this new space, and how they connected to the larger university community and their own peers. By getting them to openly discuss the positives and negatives as a group, it became clearer to identify the influencing factors that accounted for their overall experience. This activity lasted roughly two hours.

Ex1

Exploratory 1

Adding Dimension:

Fi1 Findings

Findings

The various exercises provided some very interesting information about students, their possessions and their life in a dorm. After concluding all the interviews it was interesting to see that most students had a limited number of physical possessions. All twelve participants owned books, movies or music, however not all of them chose to bring all of their respective media possessions with them to school. In most cases movies and books where found to be in a physical format, whilst music seemed predominantly digital. Three of the participants brought old high school textbooks with them. In the hopes of using them as reference material for future classes, such as calculus or statistics. Coincidentally upon acceptance into the university, the entire freshman class was given a free copy of a book to read, and as a result, all participants had this copy in their corresponding rooms. The predominance of digital music amongst most participants was not surprising, however the equal predominance of laptop computers was. Ten of the twelve participants owned laptop computers, and cited the device as one of the primary containers of their digital music.

The interviews also provided some very telling aspects about life in a residential dorm, and the process by which people begin to establish peer or cohort relationships. Significant among them, was the fact that many assumptions that had been made in the initial framing where

Fi1

becoming obsolete or incorrect. To start, the overall weight of peoples possession in their life was perceived to have shifted. While certain possessions were of significant emotional value to a person, such as a participants cello, or a religious artifact, they were not necessarily the things they valued most.

Family heirlooms or knickknacks that have been provided as keepsakes, where in the list of valued possessions, but rarely did they rank as a primary valued possession. Instead as many as eight participants -when asked what they considered their most valuable possession- responded with what would have initially been considered an unlikely choice; their laptop. There were also responses from two participants that pointed to their smartphone or mobile devices as being their most valued possession. When participant A002 was asked why they had chosen the IPhone as the answer. The participant then proceeded to state:

> "Thats my source of information, I guess, [be] cause I tend to like having lots of information, and thats one way to get lots of information all the time."

Getting some clarity as to why laptops had become so important in students lives became and interesting question. As a result, a follow up question was asked to one of the participants who had answered with

the laptop response. The participant proceeded to state the following about their feelings towards the device:

> "It comes from the fact that they are soo expensive, if they cost 300 dollars it wouldn't be my prized possession... I think it [still might be if it] did everything it does today [which is] awesome 'cause it lets me do so much... But it always makes me feel bad if I say its my prized possession... I think it limits me... I make me feel detached from society".

In order to better understand some of the feelings expressed by the participants one needs to look at the current generation of freshman. These students were all roughly born in the early part of the 1990's, a time when the personal computer was ubiquitous. They are a generation of students that not only grew up with computing, but saw some of its most dynamic innovations happen before they are adults. This naturally makes them very much in-tune to the technological evolution that has happened over the last twenty years. In the world of possessions this is most clearly seen in the way that media has changed.

While some people in their mid thirties or basically anyone born prior to 1980 still owns or remembers cassette tapes and LP's, this new generation has never had to directly interact with vinyl records, or even

better the encyclopedia Britannica in its physical form factor. They have instead grown with Compact Disks and the internet. They have done their high school research papers with the help of Encarta and the web. As a teenagers in the first decade of the 21st century, they have certainly embraced digital music, which means, while they did in fact admit to owning CD's most of their music resides on their MP3 players; and most new music acquisition happens over the internet. They are at the threshold of other major digital shifts, like the one from physical printed books, to the digital book. This was confirmed by the fact that two participants were already the owners of tablet devices -like the Amazon Kindle- which are designed for ebook experiences. And while movies continue to be experienced in the traditional theater setting, they are a generation that has had web-delivered content through channels like YouTube and Netflix.

These shifts have shaped their perception and meaning of possessions. Since these items no longer inhabit their physical space, they are very much out of mind. Their physical presence does not lend itself to them projecting additional emotional attachment to the possession, instead they have placed most of their emotional attachment on the tool or device that lets them control their media. This is why the laptop response makes sense. The laptop ends up acting as a door. Their source of access to all the things that they enjoy, and therefore the object that has the most significance in their life.

Fi1

Findings

What this means for traditional physical versions of these possessions is that they are slowly becoming less meaningful. When a physical CD or vinyl record becomes scratched or damaged, the cost of replacing it is greater. It involves spending money to replace it, but it also means having to go to a store to buy it. The effort behind buying or replacing and item, actually acts a method for building attachment to the possession. If a person has to save money or time to get it, the reward for achieving that goal is much greater. This satisfaction creates and emotional tie to the object, as it represents overcoming some form of obstacle. This simple act would not be considered burdensome, but in comparison to the process of loosing and replacing a digital file; it actually makes for a big difference. Specially as it pertains to media type files, which are now easily and commonly shared amongst friends.

The availability of these possession and the ease of acquisition, dramatically decreases the attachment to the possession. Ultimately there is also a separation that occurs; as the person is not actually possessing the object but rather a virtual abstraction of it; in some respects it becomes very intangible. Another interesting thing that was discovered as a result of the interviews was the diversity of content within the media. Participants had a wide range of tastes and often had music or movies that they would not easily admit owning. The simple fact that media was now contained behind a barrier, meant that individuals could own a variety of things, and would not have to suffer the consequences of disclosing them as on object on their shelf. The

Fi1

primary reasons for the amount of variety again falls on the accessibility factor. Most students where now not acquiring entire albums, but single songs through portals like iTunes. The ability to move single files easily amongst even friends meant that while not necessarily wanting to own an entire album of a particular artists the person could still own their one recognizable or popular song.

This shift in the perception of value of media possessions also hinted that any sort of system that would use these as a basis to create connections to people, would be flawed. Going back to the initial framing, its clear to state that any system leveraging possessions would simply provide either a privacy concern for some or an inaccurate portrayal of themselves to others. While most participants agreed that possessions could begin to disclose aspects of a persons identity or personality, most stated that media was not a strong enough marker that could be used to learn something about a person. While the cultural probe did expose certain possession to be instigators for interaction, they were usually possession with a very distinct tie to the individual; such as a shirt displaying a location associated to a participants hometown. The media possessions however, were not significant enough in the individuals mind to trigger any sort of curiosity that would lead to an interaction.

About the assimilation process and peer relationships
By combining some of the responses from the interviews and the

Fi1

cultural probes, it was interesting to see that another assumption in the initial framing was being challenged. While participants did voice personal anxiety about adjusting to a new environment, they felt however that the overall process had been relatively easy and fun. Their overall experience had been so positive that, -up to that point- orientation had been one of the best things about coming to college so far. All participants pointed out that the orientation experience was very successful at creating instances for interaction, and establishing bonds with peers. Most students where surprised at how quickly they had established positive relationships with peers. While there were some differences at the levels of closeness certain participants had achieved in relation to others, all participants had communicated that they found connections in their first two weeks, and by the seventh week, they all felt that it was likely that they would continue to nurture these established connections. One of the participants pointed out that:

> **" Orientation does a lot to put us into a good mood... [they] kind of weaned us into the university diet"**

The participant went on to explain that orientation let people begin their adjustment period to their new peers and the institution.

One participant commented on how the orientation program provided the foundation for connecting with peers, based on commonalities

Adding Dimension:

within the larger freshman group. The program provided this opportunity by specifically targeting activities within peers of similar core departments; creating opportunities for interaction. This was voiced by the experience of two participants who commented on this aspect of the program:

> "We had a few SHS events, and so that tends to bring people together"

> " most of my friends are engineers... Several are from civil and environmental engineering and several are from water polo"

When participants were asked about where these connections had evolved from, most split their answers into two basic groups. The first group consisted of peers they were actively taking classes with. The other group was made up of their roommates or dorm mates. When participants were asked to comment further on these relationships, -in particular the ones emerging from the roommate/dorm mate group- all shared a similar revelation. Sharing a living space, seemed to be a baseline for igniting interaction amongst peers; in combination with the numerous activities that had been undertaken as part of the orientation program. The importance of the space and the effect on the process of building connections, is stated clearly by a number of participants responses:

Fi1

" I'm really close with a lot for people on the floor, not so much outside of Dorm Y...[its] because I spend so much time in Dorm Y..."

Another participant commented about how hard it is to keep friendships with people, precisely as a result of not being able to see then often.

The process of developing cohort relationships as a direct consequence of having an active presence in a shared space, was particularly exemplified by a segment of the participants interviewed. Of the twelve men and women interviewed, five of them were currently living in one particular floor within one dorm. Dorm X -which is a recent construction at the university- was opened in 2003 and houses roughly 261 students. Because the facility was designed with the intention to house students, the space was carefully crafted to allow its tenants to experience the building as a community. While older dorms have been designed with the basic goal of providing students a place to live, Dorm X extended its purpose by striving to also bring these people sharing a space; together. It did so by dramatically increasing the number of communal spaces; interspacing them between rooms; and by making rooms smaller and less likely to be the point of interaction between people. These small rooms and abundance of communal space, managed to coerce its inhabitants out of their room and into the communal spaces; providing persistent instances for interaction. This coupled with the overall residence life system and orientation structure, meant that residents

Fi1

Findings

were going to be given almost daily opportunities to interact with each other.

Additionally each floor in Dorm X was assigned two resident counselors – typically upperclassmen – to act as support systems for students as well as community builders for their respective floors. Participants commented that they perceived their resident counselors as authoritative almost parental figures. This kind of position within the community allowed them to push for engagement amongst residents. Early activities instigated by resident counselors included trips to the cafeteria together, or planned activities based outside of the dorm; like bowling or shopping. These established routines have served as some of the main reasons for their successful interactions with peers. More importantly they have provided the platform that has allowed them to establish meaningful relationships with their fellow residents. While the study only accounted for interviews with five participants on this floor, the cohort group that had emerged was as large as twenty. All five participants that belonged to this cohort group reported an unusually high level of connection amongst each other. Another interesting finding about this one particular cohort group was its gender structure. While the two wings of Dorm X separate women and men, the cohort group that resulted is equally populated by men and women.

In the end, a combination of the orientation program; the community guidance provided by the resident counselors; and the physical space

dynamics, created an optimal environment for students to build these connections. More importantly these connections then provided the support system for students to adapt, assimilate and embrace the new community they are now part of.

Re Revised Framing

Revised Framing

After completing the exploratory research, some of the findings dramatically challenged the initial framing of the project. The research showed that media possession where not nearly as significant in peoples interactions, as initially thought. On the other hand, the orientation year program emerged as a successful model in providing community members with opportunities for interaction. Interactions which can ultimately lead to the development of significant and meaningful relationships within peer groups. While the goal of orientation is focused on helping students through a transitional period in their lives, it seems to offer a methodology that may be applicable in other types of community settings. It is this line of inquiry that led to the reframing of the project into a new opportunity space. Can other organizations benefit from orientation type frameworks in order to create similar types of interactions between its members?

As a result of reframing the project, it became necessary to conduct some additional exploratory research. This secondary exploratory phase was going to target how orientation programs are designed and try to distill its components into something that could become useful to other organizations or communities. Lastly, since the project shifted into a new space, it was important to find a target community; one that was in need of the type of outcomes that resulted from the implementation of an orientation program.

Re

Revised Framing

Adding Dimension:

The task of identifying a new target was made simpler by looking at the university ecosystem. There was a clear lack of organizational efforts to build community outside of the orientation program. This could be attributed to the natural migration of freshman students into their different departmental communities; after the completion of their first year. At which point it is the individual departments that would be responsible in spearheading any initiatives to build community. This however, did not appear to be a top priority for departments. These diminished or non-existent efforts to build community in departments presented an exciting opportunity. Can these smaller university communities leverage and evolve the orientation process into a tool that can be used to foster meaningful cohort relationship with peers?

In order to better understand the community structure of academic departments, some further explorations where made. The following section discusses the new exploratory research conducted for the reframing of the project.

Re

Revised Framing

Exploratory Phase 2 Ex2

Exploratory Phase 2

Two new procedures were added to help inform the new direction of the project. The first was an interview with the director of orientation and first year programs of the university in which the project was taking place. The second was a survey, aimed at understanding how members of an academic department feel about their community as well as the efforts made by their department to nurture that community.

While the initial interview participants provided a clear picture of the orientation program from a students perspective, it was important to understand the institutional perspective of the program. There is a significant amount of theory on first year student development, much of which influences the way that orientation programs are designed. This literature has evolved into a series of handbooks that are published by an organization dedicated to the design and implementation of orientation programs. These handbooks provided some of the baseline information about the nature of orientation programs and the various components that go into creating successful transitional experience for students. This literature was also used to create a set of basic questions for the interview with the director.

Interview with Director of Orientation & First Year Programs

The interview was carried out in the directors office. The interview

Ex2

Exploratory 2

Ideas to help build stronger broader social networks in academic departments

questions were grouped into three sections. The first section consisted of questions about the history of the program at the university. The second set of questions addressed the current process used for orientation, and the last section targeted unique observations and experiences about the orientation program from the directors perspective. The set of question regarding the history of the orientation program were used to try an understand how the institution has understood the needs of the students over time. More importantly these questions needed to show the evolution of the program and the roots to its more successful activities.

The second set of questions were strongly focused on the current method of the program. These question asked everything from the number of staff that design the program, to the number of volunteers that actually run it. Through this line of questions, important information about how activities get designed changed or discarded could be revealed, as well as how the program incorporates itself into other aspects of the university ecology. These
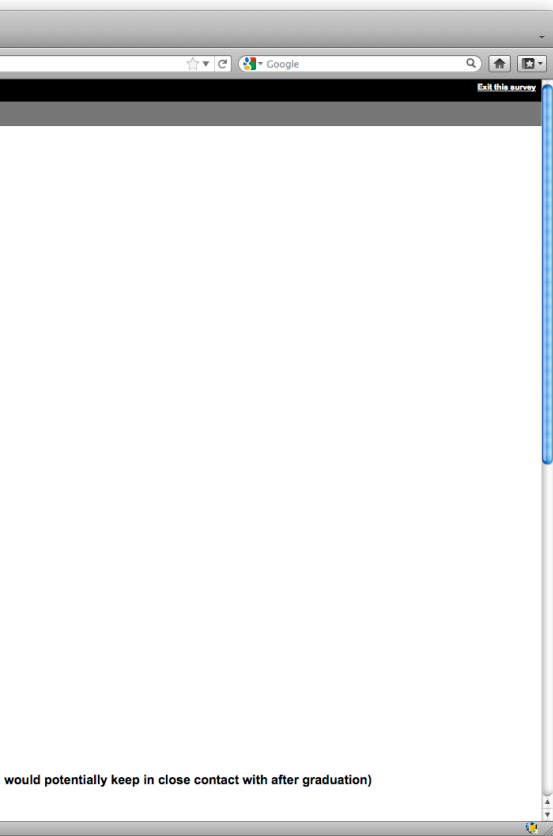

[Fig. 4]
Online Survey

Members of a unique academic apartment were emailed a link to an online survey. This survey targeted specific aspects of their community.

questions needed to collect all the specific pieces that make the orientation program function, ideally providing a clear story or motivation of the institution. The last set of question in the interview were designed to engage the director in a discussion. The questions tried to get more opinion based responses from the interviewee. The goal was to understand what the institution perceives as a successful program and what they are doing to evaluate their actions. This was an important segment of the interview, as it should also try an convey the areas of the program that are imperfect or vulnerable to certain conditions.

Community Survey

The last piece of the secondary exploratory phase was the community survey [Fig. 4]. This short survey was sent out to members of one specific academic department within the university where the project is based. The survey was created using an online survey tool, and was distributed via e-mail using a department internal mailing list system. The e-mail provided a brief description of the goal of the survey and asked readers to participate

would potentially keep in close contact with after graduation)

Exit this survey

Ex2

Exploratory 2

at their own convenience. The e-mail provided a link to the online survey, that they could access without the need for a login or password. The survey did not collect any personal information from participants, however it did ask them to specify which academic year they where in. The survey consisted of eight long answer form questions, focusing on various aspect of departmental communities. The survey targeted peoples perceptions of the department they were in; the way they felt about that particular organizations ability to build community, and whether or not they believed the effort was successful. It also asked about how many peers they planned on keeping in contact with after graduation and asked participants to define the make-up of their personal peer or cohort groups.

The survey while being short and simple, should provide a students perspective of their departmental community. Some of the questions specifically targeted their emotional connection to their own department and should as a result, help define what it is that students perceive their community to be. The last questions of the survey were primarily created to get very definitive values for the average size of a cohort group within a department and more importantly how meaningful or significant these relationships are perceived to be by individuals. All questions in the survey were mandatory and participants could not submit their responses unless all questions had been answered.

Ex2

Adding Dimension:

It is important to note that the project was always bound to very specific timeline and deadline. The reframing of the project and subsequent additional exploratory work, were unexpected additions to the timeline of the project. This resulted in the completion of these two additional phases in a shorter period of time than the one allowed of the first rounds of both framing and initial exploration. The time limitation also forced the project to make some quick decisions about the overall direction and total amount of additional research. The findings for this secondary phases are presented below, however under better circumstances, additional research would have been increasingly beneficial in providing a more complete picture for the new direction of project.

Ex2

Exploratory 2

Ideas to help build stronger broader social networks in academic departments

Secondary Findings Fi2

Findings 2

About the current orientation program

The interview with the director of orientation and first year programs, provided some valuable information about the current orientation structure and the evolution of the program over the last eight years. The director started out by providing some history about the program. The director mentioned that while the program has stayed fairly consistent in terms of goals, it has had some changes and challenges along the way. The director noted a specific period in the universities history in which the program did not exist. This absence of the program manifested itself in a lack of alumni interactions with the institution. The director attributed this primarily to the sense of pride and belonging that develops as a consequence of many of the activities run through the orientation program. The director also pointed out that alumni who have participated in orientation, regularly acknowledge this period to be one of the most positive experiences they have as students.

The orientation system that is used by the university in the study, consists of a seven day program. Orientation week is precisely scheduled to occur prior to the start of the fall semester. Each day is scheduled with a very clear goal in mind. The week is comprised of a series of informational sessions, group activities focused on university culture and groups activities focused on socializing students.

Fi2

2nd Findings

Ideas to help build stronger broader social networks in academic departments

The core community-building experience come from the socializing activities. These try to get students to interact and start building relationships while participating in activities that reinforce their current environment. In their first night students only interact with their fellow dorm mates and roommates, and perform activities within these limited groups. With each passing day the groups become larger and the activities start taking them outside of the dorm rooms and into the university campus. By the end of the orientation program, many activities are taking place off-campus and the social structures are not longer set or forced but instead are determined on the students own personal motivation to participate in the activity. According to the director, the program is very conscious of how this system is executed, and states that its success lies, in slowly letting students begin to make their own choices. The overall program is designed to expose students to their new environment in a progressive disclosure timeline.

Each new day allows for the boundaries of their experience to grow by exposing the student to the various ecosystems they will be interacting with. In other words, the program starts by letting students familiarize themselves with their dorm environment and progressively increases the scope of each new environment; until the activities revolve around the exposure of the student to the largest ecosystem; their new city. These steps are taken in order to allow the student to gain mastery of their environment in a very controlled way.

Fi2

Adding Dimension:

The program is run by student affairs administrators, but is executed with the help of roughly one hundred and twenty student volunteers. This kind of engagement from the existing community is not only surprising, but necessary. The level of commitment exemplified by the upperclassmen participation reinforces the new students own engagement, by letting older peers serve as role models. This also begins to build aspirational hopes within new students, to become leaders of the next orientation program. The director commented that the volunteer aspect of the program, is a key component to its success. Students train to become both orientation counselors and orientation leaders. These key upperclassmen positions are heavily coveted and the applications to become part of the program are numerous. Out of 180 applications 120 become volunteers for the program, and on average 50 are reserved for returning counselors.

According to the director, this kind of participation is a reflection on students own experiences with the program and their desire to continuously be a part of it. By directly employing students, the program can also have valuable input into what needs to change and improve for the next session. As orientation leaders and counselors gather experience over many years; they can clearly see the events and activities that have the most impact and effect. They can make recommendations as to how to improve the overall program form a student perspective. The program actively seeks out there

Ideas to help build stronger broader social networks in academic departments

recommendations by including them in the volunteer application process, requiring returning counselors to comment on the activities they think were most successful and tracking down the ones they think need revising or removal.

Much of the directive to get students to interact in the dorm setting even after the end of the orientation program comes from the requirements set by the orientation program. While the programs core is based on those seven days prior to the start of classes, the program sets the pace and the mood for how the remaining part of the freshman year experience is going to be. The director also highlighted the relationship between the orientation program with residence life and housing. While the orientation program falls under student affairs, it works in tandem with residence life to provide the best type of experience for incoming freshman. These two separate programs come together for orientation and deliver a continuous experience that carries over from the first week through the remainder of the year.

While universities have developed this intricate year long support structure and activity system for first year students, there is no new effort that picks up where they leave off. After that first year, most students fall into the roles and corresponding identities within their fields of study. These academic departments don't have a systematic way of addressing how these new members become integrated into

Fi2

the community, and in some cases the very departments don't have a clear mission as to how to address their identity and their goals. It is an interesting opportunity for these department level organizations to get their community engaged, in order to build meaningful relationship amongst its members. These connections can play similar roles as those shown in the orientation process, and can allow members to feel like they belong emotionally to the organization. This in turn can affect the way that these members interact with the organization even after they are no longer physically present in the community. In order to deliver the orientation framework for another community, some of the core components and characteristic of the program need to be identified. By identifying the roots of the various components of the program, it becomes easier to abstract the ideas into tools that can be leveraged by other organizations.

While each university orientation program has very tailored examples of these components they can be simplified to the basic concepts. Based on the conversation and additional literature provided by the director of orientation some common basic framework components where identified. Family, Competition, Task and Space are at the core of almost all the activities that are performed during orientation. The family component focuses on creating sub-groups or unique identities within the community and leveraging that identity as a commonality amongst peers. Competition activities focus on letting members compete in order to win a prize or some form of recognition. The family

Fi2

component can be combined with the competition component to build activities that leverage the idea of competing not only for a prize, but for the pride of your family identity or unit. The most common of concepts for orientation programs is the task concept. This as its name suggests, encompasses developing an activity that revolves around a task. While the task is also at the core of the competition concept, the task concept aims to let people achieve a common goal as a group, without necessarily needing a reward associated with the completion of the task. The task component works off the premise that, people are likely to engage one another if they know they are sharing a commonality that will bring them together to work towards a goal.

Lastly, space acts as a strong umbrella component. Orientation activities are usually based in specific locations and these locations play a significant role in the type of activity that is going to be carried out. Being aware of how to utilize the space to best achieve an activity is key. Its important to note that space can be seen through two distinct lenses. As a location that serves as support to one of the other components, or as the unifying factor in between them. What this means is that a location can serve as a resource like an open field for an outdoor activity, or it can be a classroom or dorm room which acts more as a passive member of the community.

One of the key pieces in the orientation framework is based not on a type of activity, but rather the force behind the actual execution of the

Fi2

2nd Findings

60

Adding Dimension:

program. No orientation activity can occur without the guidance of a community leader. While in the orientation model there is a series of volunteers that take ownership of that role, what's important to understand about implementing the framework anywhere else, is that there must always be someone who owns the program. From the moment the choice is made to implement it to the point in which activities begin to happen within organizations. If there is no leadership in charge of designing and facilitating the various activities, then the success of this program is less certain. Through the breakout of these core components, new applications for these techniques can become visible.

About communities in academic departments

Finally the survey provided a very accurate data set of information about the social structure of an academic department. Survey responses showed a unique sensitivity on behalf of community members regarding their feelings toward said community. Out of the thirty respondents, there was a somewhat even distribution between the number of people who responded from the various years. Sophomores, First and Second year graduates all had more than six respondents. While Freshman Juniors and Seniors accounted for three, two and four respondents respectively. There were no PHD respondents.

Overall the survey communicated a large level of dissatisfaction with the way that this one particular department - Department Y- dealt with

Fi2

Ideas to help build stronger broader social networks in academic departments

community and efforts to build or nourish said community. Sophomore students responded to the question -of whether they thought Department Y felt like a community- with :

> "I think that information is passed between students and that they form a community of their own. I think the school as a whole has a branding issue and that once kids leave they disconnect from it. there's more individual relationships rather than a unifying vision [from] what it means to be a Department Y member"

> "No. People do not really know others outside their year."

Student while acknowledging their affiliation to the community felt that they were more united by the segmentation of their years. This again is reinforced by another sophomores response to the same question

> "I think the School of Design is a community but it could be stronger. While we identify with one another, we identify more so with smaller groups (I.e. by year)"

Older community members highlighted another issue with their feelings towards the community. While it seemed that bonds could be easily

created under this umbrella of Department Y, students who went outside of that sole Department Y label, felt as though they were less likely to integrate into its core community. Senior students responded to the earlier question with the following answers:

> "It is a specific type of community that appeals to some, but is not inclusive to all types of students. For instance, the Department Y community does not encourage students who are involved outside of the field."

Another Senior echoed this feeling, and responded by stating:

> "Yes but the community is clearly divided. There are the members that are very close to each other and very Department Y-oriented and then there are members that have other activities and spend time with the people involved with them instead"

The higher the year level, the more disconnected the students felt to the community. Grad students in their first year responded to the same question as before, with the following:

> "Yes, sort of. There is a "familiar stranger" kind of community that is built in the larger sense

Fi2

Ideas to help build stronger broader social networks in academic departments

of the building and its inhabitants. However, apart from my own circle of people, I don't feel a community connection to others."

One grad student in particular captured the overall mood of the responses to the community question, with the following:

"A loosely-knit community maybe. We're small enough that I tend to see most people around, but I don't know who everyone is."

What was particularly interesting about the responses to this one question was that most students interpreted community to mean almost the same thing. While some respondents addressed the community question in terms of their own context, and answered that they indeed feel like Department Y was a community, they did so because they felt their immediate cohorts where the representation of that community. However the vast majority of respondents interpreted the meaning of community to mean the entire unit of years that makes up Department Y. This is meaningful because it means people are aware of those other levels or branches, but feel frustration because they have not been provided a method of reaching out. Had everyone interpreted the response to this question in terms of their direct context, they would have most likely answered with a positive response. This question also clarified how segmented students felt in their communities. Many respondents communicated how very little crossing over occurs amongst the divisions.

Fi2

Adding Dimension:

The survey also provided some nice reflections about peoples emotional feelings towards the department. One question specifically addressed how they felt towards the Department and provided three predetermined options plus an option to write in a non-specified response. In one instance a grad student answered the following:

> "Proud...but I think if I felt a greater connection or 'family' with the department Y as an institution, I could be much prouder".

This emotional response can be explained by some of the answers that came from an earlier question. While most students felt very proud of the Department they were in, most felt like it was lacking elements that would bring more emotional attachment to the institution. One grad student responded to the question of whether they thought department Y did a good job in building community, with the following response:

> "No. I don't think so. There aren't many events held for students and professors to have casual conversations with each other. There doesn't seem to be many 'all school events.' I remember in my undergrad having many opportunities to be in a room with the entire department Y".

Most responses to this question where primarily negative, and

Fi2

Ideas to help build stronger broader social networks in academic departments

continuously echoed the problem of isolation by year, and the lack of effort from a institutional point of view to nourish instances of interaction between members. A senior responded with not only what his answer was, but what he envisioned as possible solutions to the problem.

> "I wouldn't say that. There seems to be almost no effort put forth by the administration to instill any sense of community. We rarely have events to meet people outside our normal circles, even though members are united by a plethora of interests. Co-mingling among the classes would definitely make the place much richer and more connected, and foster a sense of identity. I could see that happening with more school wide Department Y events, competitions, etc., and a larger presence of the school online for these things to solidify from." .

Interestingly enough, this last respondents answer to question number four in the survey, outlines exactly the type of approach and activities that could begin to bring forth a stronger community. Not only did the survey clarify how students feel about this fragmented and isolated sense of community within a department, it also highlighted the emotional nature of the subject matter. While answers to questions addressed specific targets, most responses went beyond the question, and communicated a desire to improve or pinpoint the flaws of the current situation.

Fi2

Adding Dimension:

Ge Generative Phase

Generative Phase

As a result of having two different exploratory phases; the concept development phase also occurred in a divided manner. After having completed the first round of exploratory work, there were early attempts to develop concepts using some of the findings of this initial portion. It was after some of these efforts and the realization that the problem space had shifted, that the idea to reframe the project emerged. A secondary concept development phase was undertaken after the reframing and subsequent exploratory phases of the project. The following section discusses those two separate development phases.

Concept development - Phase 1

The initial findings in the interviews and cultural probes lead to the development of three unique concepts. These early concepts were focused on the freshman year dormitories and tools that could aid students in developing and nurturing meaningful relationship with peers.

One of the key findings in the early research showed that students in Dorm X managed to develop tightly knit cohort groups. These cohort groups currently did not have any sort of connecting system that allowed them to interact when they were not sharing the same dorm
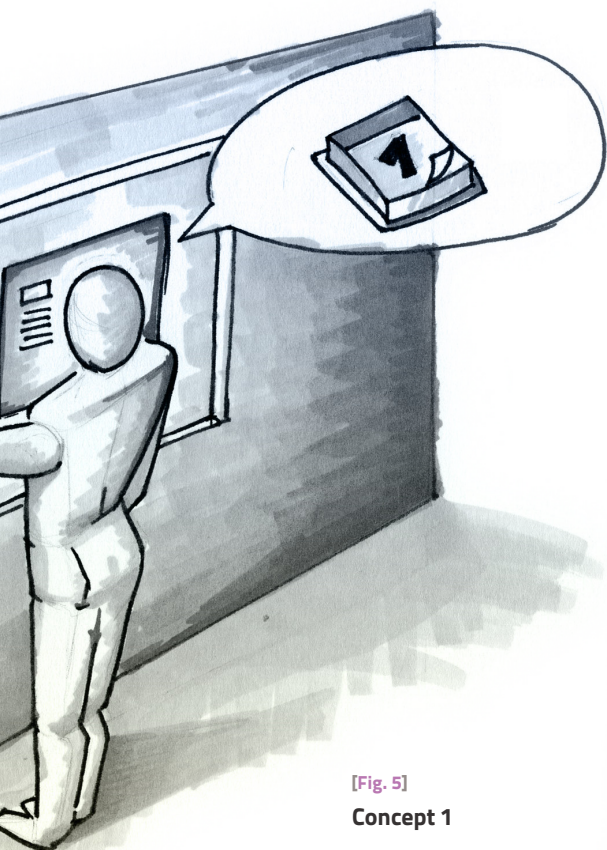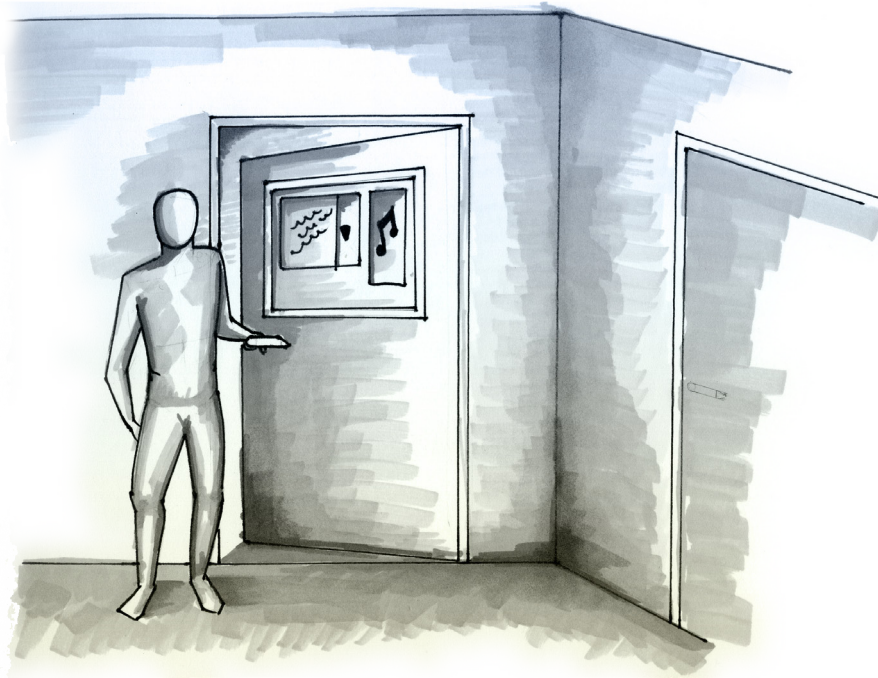
Concept 1

This concept taps into the various activities students are constantly doing, and gives them a platform to better communicate these type of plans.

space. Since the space had emerged as a critical factor in the social interactions of these cohort groups, the first concept developed, was a tool to connect these cohorts digitally by means of their physical space. The idea focused on letting them create and manage small social networks, that could be used to inform other peers in their cohort group about activities they were participating in. While this tapped into already common behaviors associated with other platforms like Facebook or Twitter, the distinguishing element in this concept consisted of the display and projection of shared information into their common physical space. A large touchscreen display **[Fig. 5]** would inhabit some of these important common spaces in the dorms, actively publishing information that its users would like to share with their community. Serving as both a dynamic activities board and messaging system. The display could also be a used as a source for imputing information, allowing students to continuously broadcast information to the cohort peers. The particular strength of this concept was in its ability to

Ge

Generative

Ideas to help build stronger broader social networks in academic departments

provide a centralized communications channel, that was actively tracking and displaying the behaviors of its community in context.

The second concept took this active feed of information and personalized it even more by placing not one digital display in the common areas, but rather individual displays in each dorm room door [Fig. 6]. This concept was designed to not only create a point of interaction for peers who were in the space

[Fig. 6]
Concept 2

The door mate would ideally serve as a way to communicate with peers, not only to find out about their behavior inside the room, but to leave active messages that get communicated to the owner of the room.

Ge

Generative

and wanted to relay a message back to the resident of the specific dorm room, but this concept was also focused more on trying to bring out some of the individual behaviors of the inhabitant of that dorm room outwardly to the shared space of the hallway. As the inhabitants of each dorm room performed basic activities, like playing music or watching movies or reading books, the display could begin to collect some of these behaviors and begin to display some of this content outwardly in the public space.

By creating a visual manifestation of some of these activities, the display could begin to entice passersby to inquire about a specific action, like a movie or song that had been recently seen or played, therefore creating instances of interaction based on some form of common item. A lot of the research on possession fed the development of this concept. While there are some inherit privacy concerns associated with this idea, there is also a very valuable experience that is provided. While the door display serves as a window into a rooms behavior, it is the context of these behaviors that can aid peers in, identifying other emotional information about the owners of that space. Such as using their choice in music or books, to help passersby understand the overall mood of the students inside the dorm room.

Lastly the third concept to evolve from this initial phase was, the idea of developing a tool to preemptively personalize the dorm room space. What this concept aimed to do, is give freshman year students the

Ge

Generative
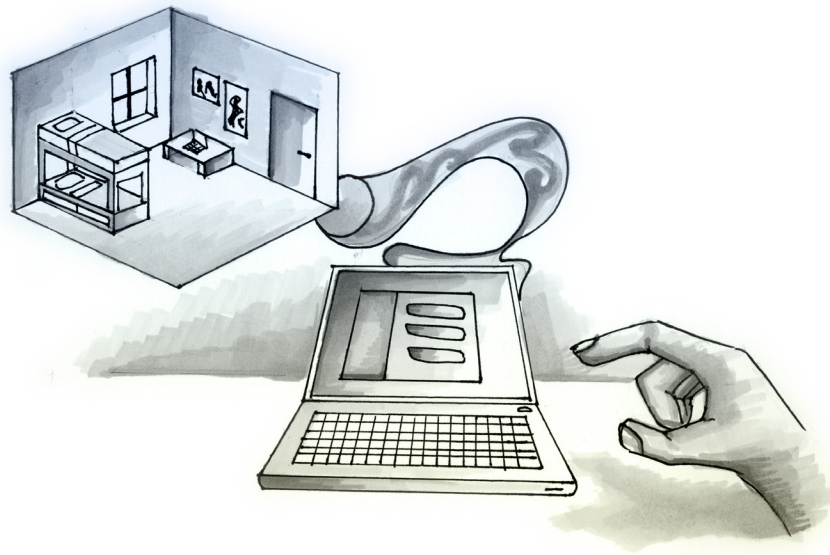
[Fig. 7]

Concept 3

A consideration for a project would be to give the incoming students the ability to customize their rooms environment.

ability to design their own room prior to their arrival on campus. There were two particular tracks that were explored for this concept. The first was based on actually developing a tool that could be used like a catalog system [Fig. 7], where student could pick and choose everything from their furniture to the arrangement of the furniture, prior to their arrival on campus. The second track aimed to allow students to customize their space by way of a large digital display or digital wall. Track one was heavily focused on manipulating

the physical space, while the second track was trying to give the student a sense of ownership of the space by letting them build an interactive wall of stuff that they could customize with personal belongings. The second track also incorporated the development of a student portal, where students could manipulate their digital wall, in order for it to display everything form their current school calendar, to photos or other digital type of mementos. It could also have a component for families to interact with their kids via the display, such as a public drop box that parents could access in order to post content to the students wall. By letting them manipulate the space, it could get them to simplify the amount of things they might have needed to bring initially, as well providing an exciting place for students to express their tastes and personality.

These early concepts fell short because of a combination of factors. Concept One was adding another point of interaction to an already full plate. Students are spread fairly thin in terms of interactions with digital platforms and the idea of introducing yet another social networking tool might not have gotten the right type of response. The activity board also had some issues in term of fighting for attention with the actual physical counterparts. How likely was it for students to engage through this system if they were sharing the same space to begin with. It seems this idea would be best suited as a virtual space where posting messages/activities would be the core functionality. This can easily be done by tools already available to the public.

Ge

Concept two posed some interesting concerns regarding peoples privacy, though they could easily be circumvented with the right type of user controls. Lastly the dorm room customization concepts proved to be impractical to implement at the current moment. However, the overall reason why these concepts where not solidified was because in all instances the concepts felt forced. A digital solution to a not so clear problem. While these tools would be exciting and compelling to see in the dorm environment, they were neither essential nor providing a significant improvement in the lives of freshman year students. And were far from truly addressing the initial desire to create meaningful interactions amongst peers. However the overall dorm room experience, did provide the right kind of ingredients to design a unique approach to community building for other organizations.

Concept development - Phase 2

There is an important discussion that must occur when looking at the combination of findings from both exploratory phases. While the initial research had confirmed students needs to develop meaningful relationships with peers -in their transition into college life-, they were however were not ill equipped to achieve this goal. On the other hand, the transitional program provided by the university created significant number of opportunities for students to both assimilate to their new environment, and establish connections to peers. Meanwhile this highly concentrated effort of community-building exercises was

clearly absent in students lives after the completion of the first year. The research showed that the primary motivation for the orientation program is to successfully manage the transition of students into this challenging new environment. Once this transition is completed, most students have gained the acceptance and mastery of the environment, and therefore need no further assistance. But the orientation program proved to be more than just a support system. It provided the basis for understanding how to build experiences that bring people together and more importantly that can be leveraged to bring communities closer. While this community effect is more of a by-product of the overall experience of orientation, it serves as a successful exemplar of an outcome that could be replicated and used elsewhere.

The concepts in the secondary phase were focused in taking this orientation model and applying it to the parts of the university community that where clearly lacking the tools to build and foster community. Additionally through the findings of the secondary phase of research, a key target of the concept was going to focus not only in utilizing the orientation scheme as a method of bringing community together, but applying some of those concepts in a very distinct way. This key modifier being the conscience application of the tools to mixed segments of a community. Since orientation had successfully shown that activities can begin to bring people together and instigate connections, then this method was going to be used to connect people who currently did not have any means or opportunities for connecting.

Ge

Generative

In a department setting this of course is represented by the multiple level years that exist within this one community. By providing these points of contact, people could begin to build peer relationships, and -with the departments help- be given these opportunities in a recurring fashion, in order to solidify those peer relationships into cohort ones.

By implementing this approach within the department structure, the community could see similar gains as those experienced by the freshman year students. Which, like the orientation program , could be tracked as a way of seeing their long term effect on the community.

In order to convey all these steps and material in a clean manner, the final concept evolved into a toolkit for departments. The idea for the toolkit came from looking at some of the literature on designing orientation programs. As mentioned earlier, orientation programs have a distinct goal of providing a support structures for these transitional phases in students lives. The literature that guides universities on this matter, suggest very robust programs that span weeks even months. Primarily because the transitional phases require persistent attention and action. However students in the department structure are well beyond transitional phases. The need to have this very programmatic approach seemed excessive, and impractical for departments to achieve on their own. Instead a more practical solution could be to provide a source of material, that explained what each of the major components or abstract concepts of the orientation program are, and how they can

Ge

Generative

Adding Dimension:

Orientation Components

Family, Competition, Task and Space.

be customized and leveraged to create unique targeted programs within communities. This type of presentation of information is clearly aligned to the type of structure that a toolkit can provide.

The toolkit would be made up of the necessary information that departments would need to know, to begin to run activities based of the components identified through the research. The toolkit would also emphasize the need to perform or execute most of these components with mixed segments of the population; as this addresses the main issues with segmentation that are currently occurring within the department. The concept also included a new component that was not utilized by the orientation program yet had been identified as a powerful tool in creating and maintaining community. While technology is not an original piece of the orientation program or process, the observations from the interviews confirmed that providing a digital tool for students, could be a good source for managing and more importantly maintaining information

Ge

Generative

about their environment. In the final concept, technology was envisioned to play the role of archivist. Basically as departments begin to implement some of the components of the orientation program. The technology piece could begin to track the progress of these activities by ways of a portal or website. As the activities cycled through, the portal could perform as a memory to all the things that have gone before. It would begin to create a sense of legacy to the activities and, a sense of history to the community.

The final concept while not directly specifying what activities departments must do in order to get their community to engage, would break each of the components [Fig.8] - Competition, Family, Tasks and Space - down into elements that the department could use to build their own set of customized activities. The project understood that this level of customization was key for the success of the activity. In order to guarantee the best possible outcome, the toolkit would also profile case studies, that would provide hints as to how to implement and execute each of the orientation components within a community.

Ge

Generative

Refinement

Refinement

Because university departments were identified as the target for the implementation of this project, it was important to clarify how to communicate the concepts to the department in a useful way. While the toolkit specified in the concept development section accounted for the process of building and designing activities, based of orientation concepts, it did not account for other components or characteristics needed to successfully execute the concepts. Many of the orientation activities are not meant to occur sporadically nor are they meant to be unplanned and quickly put together. In order to safeguard against all the possible misfires; the final refinement of the toolkit focused on providing guidance. Particularly for constructing and implementing the orientation concepts, as well as outlining the various dependencies that each activity brings with it and how to build in support plans for those dependencies.

The refinement process also identified other important elements that could be beneficial in the final toolkit. Academic departments may be well aware of their community needs, but may not have the necessary background in student development to determine what activity would best fit their community. As part of the refinement process, it seemed interesting to consider how else to expand the toolkit. One such expansion is the possibility of developing a companion

community diagnostic questionnaire. This type of additional tool would aid departments in carefully identifying and tailoring specific activities to their current student body population, based not only on the community needs, but also on the very limitations and capabilities of the department.

The basic outline for the toolkit consisted of three distinct sections that would address different steps in the process of building these community activities. These sections titled 'Understand, Engage and Maintain" respectively, focused on these over arching goals and provided the user with the necessary information that would allow them to complete those specific phases of the process.

Final Design

The final concept has been designed as a book. The book format seems to be most structured and sequential way of delivering the breakout of the orientation components to potential users. While the contents for the entire toolkit have not be finalized, a primary

[Fig. 9]

Final Concept Prototype

The tool kit is aimed at expanding the possibilities of not just achieving direct peer interactions but pushing for dimensional connections that address the segment barriers that occur within departments.
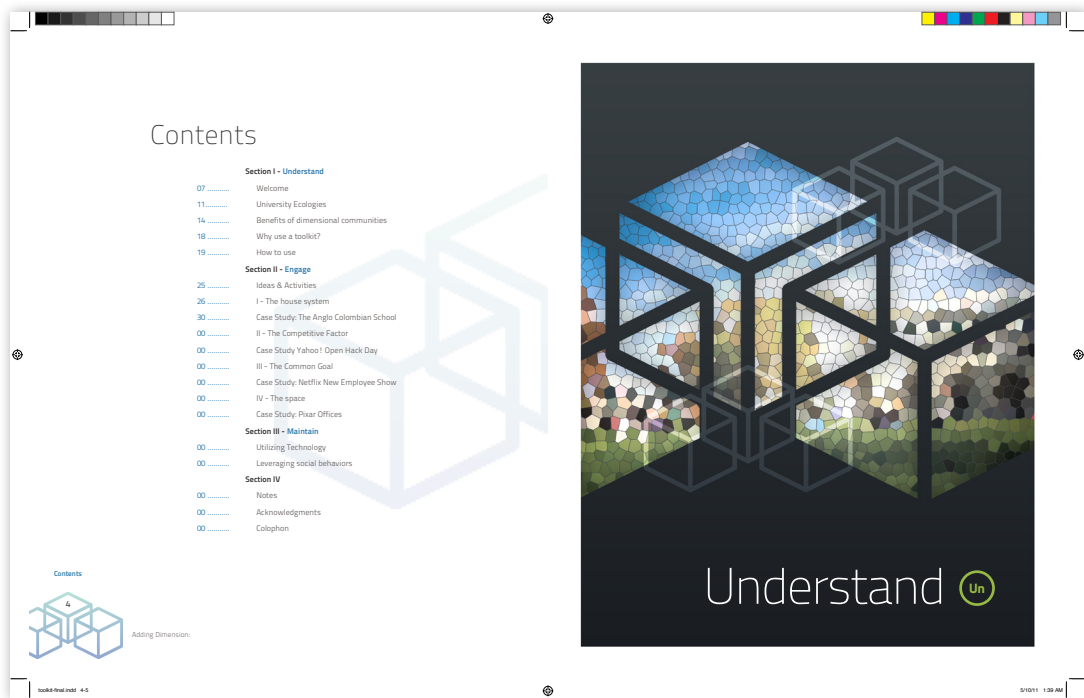
Rf

Ideas to help build stronger broader social networks in academic departments

Contents

Understand (Un)

sample and outline of the toolkit has been designed. This prototype of the toolkit is medium sized book, roughly measuring 8" x 10" inches. The prototype **[Fig. 9]** currently shows the three main content sections. As mentioned earlier, each section corresponds to actions that the user can begin to take as they begin to develop community-building exercises within their respective communities. These three sections are: Section I - Understand

[Fig. 10]

Section One Spread

The toolkit is divided into three sections focused on overall arching goals. These main goals should help the user understand what each chapter is trying to do.

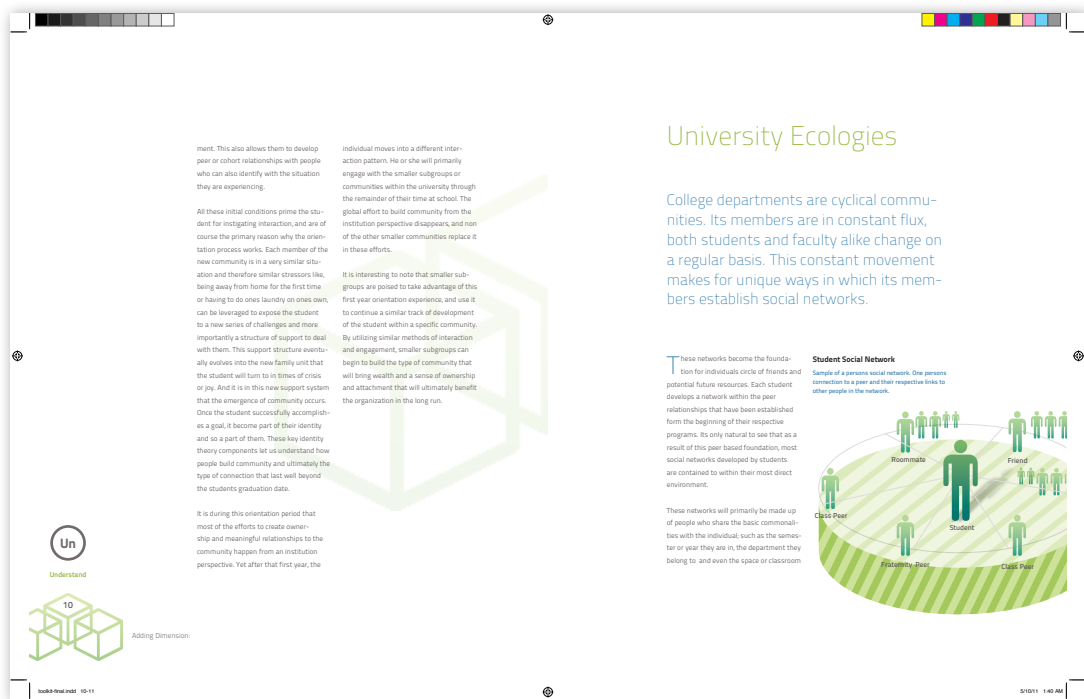**Rf**

Refinement

Adding Dimension:

[Fig. 10], Section II - Engage, Section III - Maintain. A fourth section has been added and serves as a notes and acknowledgments area. While the idea of expanding the toolkit to include a diagnostic element for departments was important, the time constraints of the project did not allow for a more in-depth exploration of this piece of the final concept. It has therefore been removed from the final toolkit prototype. It has however, remained as a possible branch for further exploration of the project. This decision was made because of time constraints. In order to develop a significant and powerful diagnostics tool, additional research would have been needed in order to design this intricate component. Similarly the final prototype accounts for a completed first section, and a full sample of one of the components of the second section. It does not build out the remaining part of section two or section three. These decisions again are directly influenced by the pressing deadline for the completion of the project.

In the first section, the toolkit provides the necessary background information to the user, regarding the natural structure of academic departments **[Fig. 11]**. Smaller chapters within the section, break up these introductory topics into explanations on how university ecologies are defined; why departments benefit from strong dimensional communities; why a toolkit exists and lastly a baseline introduction as to how to use it. This section is particularly valuable because it sets up the use of the toolkit to the university department structure. It strongly reinforces the need to build dimensionality into the community, and

Rf

Refinement

The inset shows a page spread with the following readable elements:

University Ecologies

College departments are cyclical communities. Its members are in constant flux, both students and faculty alike change on a regular basis. This constant movement makes for unique ways in which its members establish social networks.

Student Social Network
Sample of a persons social network. One persons connection to a peer and their respective links to other people in the network.

[Fig. 11]

About Universities

The first section of the toolkit provides a quick overview of the way that students develop social networks and how the structure those networks inside departments.

highlights the fact that department must always be aware to actively distribute and cross pollinate its activities with the various members of the community.

Users should begin their toolkit experience by reading this first section thoroughly. By doing so the user is positioning themselves in the correct mentality to begin to think about developing community initiatives. This section will also provide the necessary initial steps that need to be taken before any

activity planning occurs. As the title of the section indicates, this initial phase is all about understanding the users current community and the motivation that has lead someone to seek out the help of the toolkit.
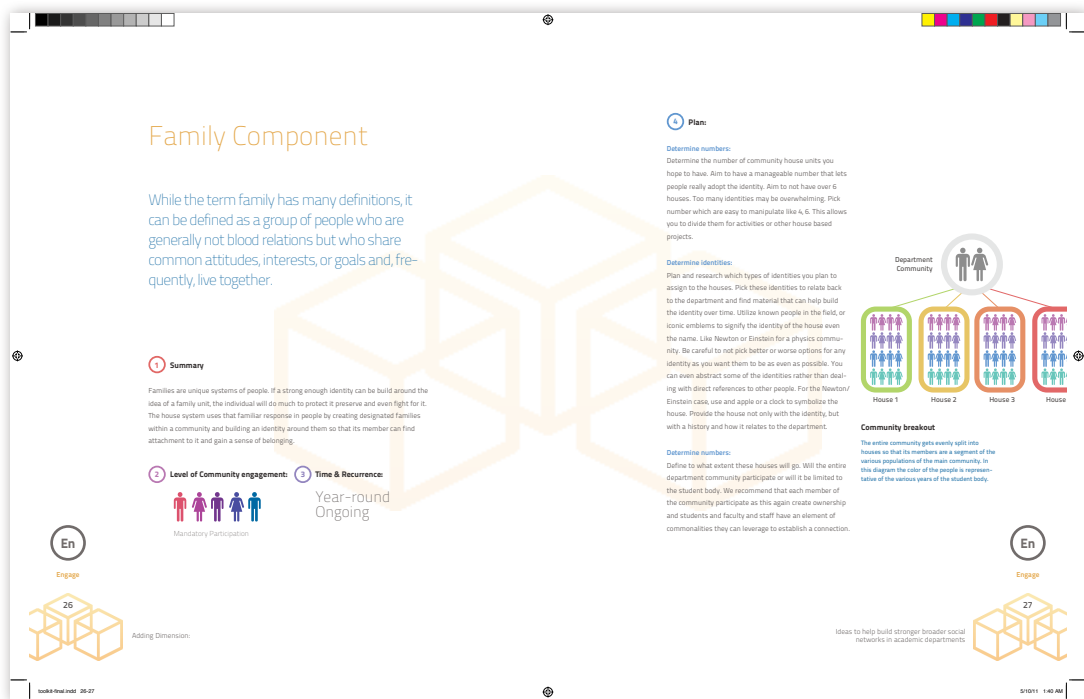
The second section takes all the components of the orientation program and breaks them into smaller chapters. And introductory chapter discusses how ideas and activities can be powerful in the process of building community. The remaining chapters of this section explain the four main components of orientation programs, Family, Competition, Task and Space; and provide case studies for each [Fig. 12]. In the prototype version, the content only goes as far as the explanation of the Family concept and the case study that exemplifies the concept in action. Each component explanation tries to further provide guidance to the user by providing steps to complete the development process. In all instances the toolkit summarizes the component; determines the levels of required engagement by the community; and establishes a baseline measurement of the time and resources needed to implement it. It also provides a building or design outline that covers how to plan an activity utilizing the concept, an outline for how to execute it and lastly an outline for how to utilize the outcome.

These very defined steps allow for whomever is utilizing the toolkit to identify their own need, and build the component with their own community in mind; while still following these baseline guidelines that account for the structure of the component. The case study [Fig. 13] examples follow similar steps to those provided by the explanation part

Rf

Refinement

Ideas to help build stronger broader social networks in academic departments

Family Component

While the term family has many definitions, it can be defined as a group of people who are generally not blood relations but who share common attitudes, interests, or goals and, frequently, live together.

① Summary

Families are unique systems of people. If a strong enough identity can be build around the idea of a family unit, the individual will do much to protect it preserve and even fight for it. The house system uses that familiar response in people by creating designated families within a community and building an identity around them so that its member can find attachment to it and gain a sense of belonging.

② Level of Community engagement:

Mandatory Participation

③ Time & Recurrence:

Year-round
Ongoing

En

Engage

26

Adding Dimension:

④ Plan:

Determine numbers:
Determine the number of community house units you hope to have. Aim to have a manageable number that lets people really adopt the identity. Aim to not have over 6 houses. Too many identities may be overwhelming. Pick number which are easy to manipulate like 4, 6. This allows you to divide them for activities or other house based projects.

Determine identities:
Plan and research which types of identities you plan to assign to the houses. Pick these identities to relate back to the department and find material that can help build the identity over time. Utilize known people in the field, or iconic emblems to signify the identity of the house even the name. Like Newton or Einstein for a physics community. Be careful to not pick better or worse options for any identity as you want them to be as even as possible. You can even abstract some of the identities rather than dealing with direct references to other people. For the Newton/Einstein case, use and apple or a clock to symbolize the house. Provide the house not only with the identity, but with a history and how it relates to the department.

Determine numbers:
Define to what extent these houses will go. Will the entire department community participate or will it be limited to the student body. We recommend that each member of the community participate as this again create ownership and students and faculty and staff have an element of commonalities they can leverage to establish a connection.

Department Community

House 1   House 2   House 3   House

Community breakout

The entire community gets evenly split into houses so that its members are a segment of the various populations of the main community. In this diagram the color of the people is representative of the various years of the student body.

En

Engage

27

Ideas to help build stronger broader social networks in academic departments

---

[Fig. 12]

Component Breakout

The second section details each components elements and provides users with tools to understand the level of commitment and the basic method of application of the concept.

of the component. However the case study conveys the decisions made by the sample organization through the process of designing their activity, as a way of demonstrating how to solve for each of those steps. This piece of the toolkit is significantly important, as it can help the user brainstorm ideas or have a starting point from where to begin developing one of the components.

Like the first section, users should read the second section in its entirety, but may bypass

Rf

Refinement

the case studies. After reading all component definitions, the user should have a clear grasp of how each of the four main components is structured, and how to begin to design an activity based on any of the components. Each component has a plan, execute and utilize element, and users should use this structure to begin to generate their own ideas.

The last piece of the final concept is a technology piece. As mentioned earlier, this piece is not part of the traditional components

[Fig. 13]

Case Studies

The second section also provides case studies for the main four components. The purpose of the case study is to show the component in the real world. Hopefully so that users can use it as inspiration for their own ideas.

Ideas to help build stronger broader social networks in academic departments

of the orientation program structure, however, its a tool that can provide additional support for the success of the remaining components. While very little time was left to experiment with the details of the technology piece of the project, there are some key functions that this element must contribute to the toolkit. The final details of this piece would be outlined in section three of the final toolkit.

There are now many online platforms that serve as powerful social networking tools; and some have become ubiquitous with people. This broad appeal has also made them far too overloaded. There are currently no tools available for users to create their own focused social networks. Most of the current experience relies on peoples motivation to belong to an all encompassing entity vs. many much smaller targeted entities. The broad reach of something like Facebook is very powerful when it comes to keeping track of relationships, it is however, terrible at nourishing them; simply because its far too much to digest in one place. Facebook also suffers from cross-pollution of multiple intermingled networks. While an individual has separate experiences with each of these networks in the physical space, in the virtual platform, these divisions disappear, and work networks cross over into family networks with no clear way of separating them.

This last piece of the toolkit focuses on developing a companion online portal that lets departments build their own social networks. This idea is focused on, not only letting the department begin to build a virtual

identity and presence, but also to begin to build legacy in the existing networks of peers. The idea is not to create a new Facebook, but rather leverage these existing tools, to get students and staff to connect their activities to the community portal. Ideally this portal should aim to provide targeted content that is not littered with the rest of the online social presence of an individual. This portal can also be leveraged to coordinate track and archive the various other components that become implemented within a department. This history can then serve as another connection back to department. As members come an go, this portal can serve as the living record of their presence in the community. Members can use the tool to not only as a way of looking back in time but also as a source to reconnect with peers.

The following three scenarios show how the main stakeholders interact with both the toolkit and the results of utilizing the toolkit. While the administrator scenario is the most tangible and direct interaction with the toolkit, the subsequent outcome scenarios are directly based on actions that result from community engagement with the concepts that emerge from the toolkit.

Administrator Scenario [Fig. 14]

This scenario shows how administration stakeholders can potentially use the toolkit to begin their community-building initiatives.

Mary, Director of the Design Department has noticed that the Design

Ideas to help build stronger broader social networks in academic departments

[Fig. 14]
Administrator Scenario

community is lacking some unity. While she knows that this a problem, she is not quite sure how to begin to change it. As a first step she has acquired the Adding Dimension toolkit, in the hopes of learning about what type of things she can do to begin to bring her community closer.

After studying the material of the toolkit, she convenes a faculty and staff meeting and proposes that they all engage in a planning activity that will result in the creation of a community–building exercise. In this same meeting she will hopefully get excitement out

Rf

Refinement

Adding Dimension:

of her fellow faculty and staff, and be able to identify someone who might be willing to spearhead the efforts.

In the meeting with the faculty, she shares the various options that are available to the department, and asks that they all brainstorm ideas as to the type of activities that the department could create to engage students. One of her faculty points out that he likes the competition component. He states that competition is always a good motivator for students, and if the incentive or the reward is meaningful, it will likely create excitement in the community. Another faculty suggests that if the competition activity plan goes as expected, they could begin to see this taking place each year or potentially even each semester. The staff and faculty agree on a competition based activity, and they begin to define the criteria that will be used to promote the event as well as the rules and limitations.

They settle on creating a yearly Design-a-thon. This competition will look to get groups of students as small as three and as large as five to design a product experience from beginning to end. They have followed the guidelines of the toolkit, and have required that all groups be made up of members of different years. While initially suggesting to hold it at the end of the academic year, they all agree that the workload is to high for seniors and grad students at the end of the year and they suggest running the competition in an alternative schedule. Either running through the summer, or in the first semester of the academic year.

The staff also evaluate the kind of prize that students should get. They initially point to writing a story that could be published in the university news section. However they discard this idea because it feels far to removed form the students experience. The faculty suggest creating a prestigious award that is handed to the winners; one that provides both a monetary prize and the chance to present the work to investors. The faculty also suggest that in order to keep the award and the competition with a fairly high profile, the faculty could actually withhold a winner if they find no suitable project worthy of the prize.

The director of the department decides to designate a community-fellow. The director assigns someone in the organization to be the point contact for the activity and regularly meets with this individual to continue the planning and execution of this activity. When the director of the department and the community fellow agree that the activity is ready for execution they launch it to the community at large.

Member Scenario (Current Student) [Fig. 15]

This scenario shows how current students within the department can begin to take advantage of the activities in the community to extend their personal networks.

Robert has been walking in and out of class for the last week and has noticed the poster for the annual Design-a-thon. He heard about the competition in his freshman year, but did not know what a big deal it

Adding Dimension:
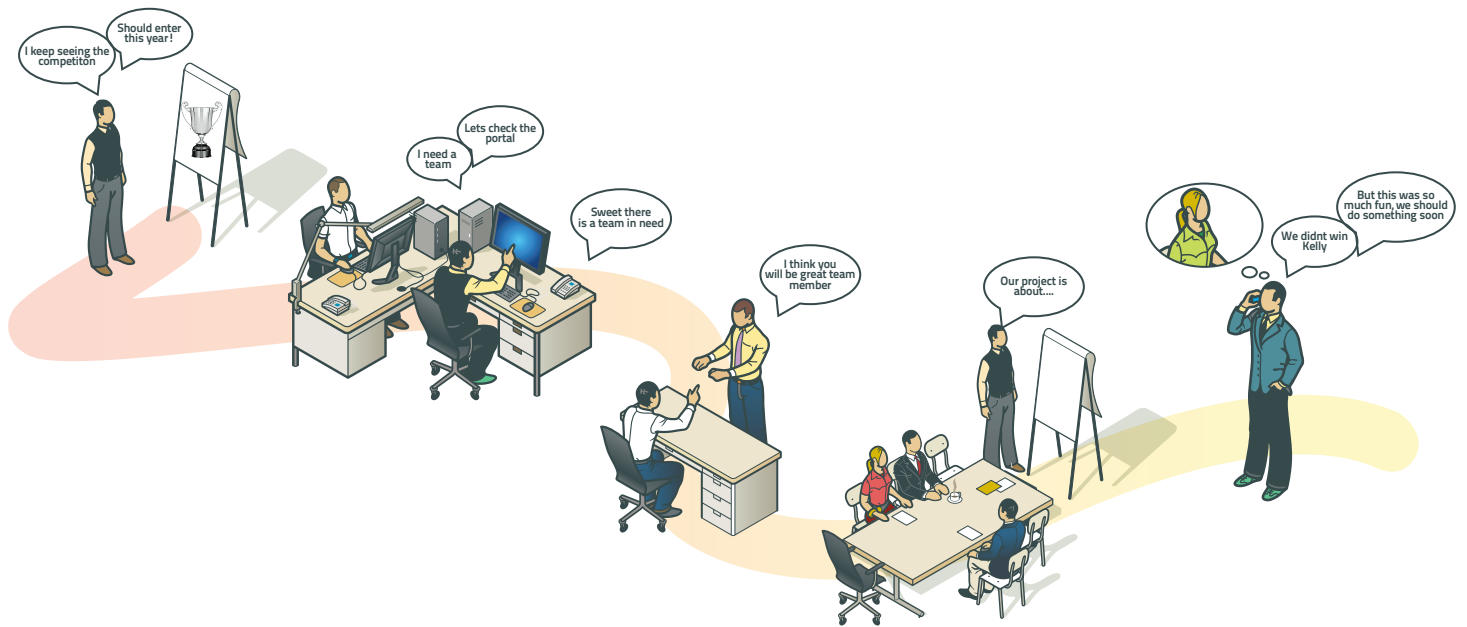
[Fig. 15]
Current Student Scenario

was till much later. He knows that he wants to compete this year, but has no teammates. He knows the department creates a place in the online portal to find teammates for the Design-a-thon event. Later in the day he logs on to his computer, and visits the design portal to see if there are people who are looking for a team. He manages to identify three groups that are looking for people. While he knows none of the people in the groups personally, he's heard of one senior industrial design student who is really talented. He would love to work with that team, and he is eligible to do so. He reaches out through the portal and waits for their response.

A couple of days later he gets an e-mail back from the head of the team suggesting they meet for coffee to talk about some ideas and to see if he would be a good fit. After the coffee session he joins the team and they begin their competition. After the three months of competition are over, they present their project to the judges. Sadly their team comes in second. While Robert is slightly disappointed about the results, he is very happy to have made new friends as a result of the competition. And to have had a chance to work with Kelly, the very talented industrial design student.

Alumni Student Scenario

Member Scenario (Alumni) [Fig. 16]

This scenario shows the long term effect of creating meaningful broader social networks within academic departments.

Mark (Class of '08) and Amy are looking for an intern for the summer. Mark, having graduated from CMU School of Design, suggests to Amy that he may still know some students in the

Rf

Refinement

Adding Dimension:

current program. Mark uses his login information to visit the Design schools portal. There he finds his friend Susie (Class of '11) who is a senior this year. Mark and Susie have both participated in some of the School of Design competitive Design-a-thons, and Mark is well aware of Susies skills as a designer. Mark thinks she would be an ideal candidate for a summer internship. When he calls her, Susie lets Mark know that she already has a job, but that she might be able to recommend someone else. She then meets up with Samantha (Class of '13) and asks if she would be interested in a summer internship. Samantha says she would love to work, and provides Susie with all her info. Susie forwards it on to Mark and Amy. Later they invite Samantha to interview. And she proves to be perfect for the opportunity.

Ideas to help build stronger broader social networks in academic departments
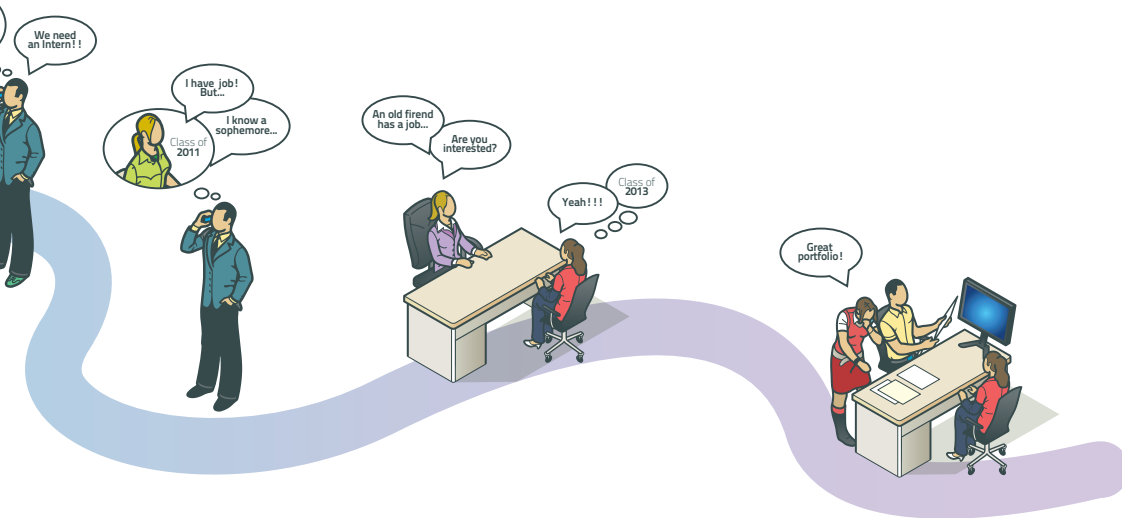
Evaluation Ev

Evaluation

While the toolkit can be very powerful in the hands of an active community, a stale or stagnant community will struggle to get some of the concepts implemented. Much of the motivation of communities to come together and encourage peers to interact, comes from the positioning of the organization in the first place. The toolkit will cover the importance of understanding the level of commitment that is needed in order to complete any of the concepts. It also talks about how important it is to align the mission philosophies of the organization to any community-building exercise that is created. If the organizations convictions are not behind the implementation, then the outcome is likely to be a poor one since; there is no clear voice that is communicating the importance of creating that sense of unity or belonging. Another setback for the tool kit is that while it can perform well in large settings - as the orientation shows- it needs a dedicated person or group to take ownership of the community initiatives and therefore the design of any program that may becomes implemented. This entity will also be in charge of defining how capable the current resources are to making the program happen. If not enough people or resources are available, again the program will likely have negative results.

While the methods outlined in the toolkit have proven successful

Ev

Evaluation

in other situations, this application has yet to be tested. It would be beneficial to have a trial run of the experience before suggesting it to other organizations as a solution to segmentation problems in departments. The reason it did not happen for this project was simply because there was not time to implement it. A proper test would have required a commitment form an origination and significant period of time to plan and test it. Far more time than is available in the timeline of the project. Even more complicated to predict is the long term outcome, which can only be measured, if the test was tracked over time. Which again can be a hard task to accomplish. It seems that the only plausible way of beginning to see some results around some of the activities proposed, is to slowly implements potions of the process, so its not a large and uncontrollable burden that occurs all at once, but rather a step by step process that allows for communities to adapt to the requirements of the activities.

Lastly as mentioned in the concept development section, research into the community diagnostic tool would have been a great addition to the overall toolkit, and would have aided in helping departments organize their initiatives. However this seems like a completely independent project, and would require a whole other exploration and design phase just to account for this piece of the toolkit.

Ev

Evaluation

Reflection

Reflection

This project has been filled with unexpected turns. During these two years of design education, much of the efforts of professors and peers have been focused on getting us students to learn the design methodologies. The core of this method is heavily structured on the designers capability to clearly identify a problem area. Then use these user-centered methodologies to both validate the problem and come up with a very integrated and cohesive solution that directly targets that problem. Interestingly enough this project has taken some leaps and jumps within the traditional design structure. While most of the project you have been reading about, does account for traditional methods of user-centered design like contextual inquiry exercises, interviews and cultural probes, it has not followed the traditional design-prototype-evaluate trajectory. Not being bound to the traditional path has made for some very challenging times, however the outcome of the overall project has been a unique reward.

After my first set of explorations and findings, I was at loss for words and ideas. I felt stuck simply because I had failed to identify a significant enough problem that merited a designed solution. While I could have simply used the literature to back up my initial concepts for freshman year students, I would have provided a disservice in the end. The product or idea I was designing had no real meaningful impact on their lives,

Rx

Reflection
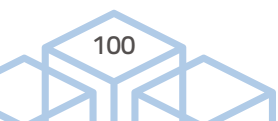
Adding Dimension:

and felt simply like the broad brush of technology being applied to yet another environment, without necessarily really needing it.

It was through a series of conversations, about what I had witnessed through the observation period of the exercise, in combination with some personal experiences, that I realized patterns were emerging. Patterns which at the time had very little to do with the original idea of the project. The realization that the orientation program was this box of building blocks that could be rearranged to build a whole new experience, was not an idea that emerged from the traditional path of the design process, but rather leap into some unknown territory.

While traditionally we have let problems be the motivating factors behind the ideas for new designs, this instance was providing a desired outcome as a motivator for design. While the solution was being provided by the orientation framework, what interested me as a designer was not replicating the program but looking at the pieces of the program that accounted for the ultimate outcome. And then identifying a target that would benefit from this outcome. I took a chance on this approach and proceeded to develop the project that's is discussed in this document. While I don't necessarily think that this approach is applicable to all instances of design, it is in my opinion however a valid way of looking at new ideas.

Much of the challenges in design come from either improving peoples

lives by evolving a current experience, or simply providing a new paradigm that will likely establish a baseline experience. Designers work on these two spaces without sometimes taking a step back and realizing that the same approach doesn't always work for both or either. What this process has taught me about design, is that the design-prototype-evaluate structure that we have been taught and asked to use, should only serve as a starting point. Something to get the mind in the right place, while not necessarily being the only path to achieving an outcome.

Similarly this project has been instrumental at making sure that I evaluate what I make, not from simple validation or testing perspectives but from a more practical one. Designers are working in a very distinctly digital mindset, and it was interesting to identify through this project, that some of the richest experiences are hard to replicate or channel through a virtual experience or digital device. That in fact physical interaction is still uniquely powerful in creating emotional links to people, and that the way we share our physical space with others, has profound effects on us.

Rx

Reflection
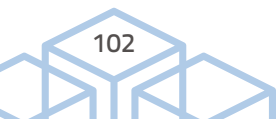
Adding Dimension:

Co Conclusion

Conclusion

In conclusion there are two important takeaways from this project. The first comes from the research and the final solution. Through out this entire process, it has been interesting to see how people react to belonging to communities. This emotional connection people develop to these organizations or institutions in their life, carry significant amount of meaning, which means the idea of developing a tool to better exploit those interactions is not only necessary for the communities but incredibly beneficial to its members. These rich interactions can have profound developmental effects in people, that can contribute to overall happiness and well-being. As mentioned in the evaluation portion of this document, it would be extremely beneficial to see some of these concepts implemented and tested, not only as validation for some of this initial work, but as a way of helping us understand how we build lasting meaningful connections in out lives. Particularly those connections made during key phases, such as the one experienced while studying at a university.

The second takeaway has more to do with the design process. This project has taken an unusual path to get to where it is, and while the result seems intuitive even obvious, it took many twist and turns to arrive at a place that felt like a unique design opportunity. The design process for this project has added some perspective to the

Adding Dimension:

way designers can approach solutions. Rather than solely focusing on identifying the problem space and targeting a solution for this identified problem, its interesting to consider what it means to work off successful outcomes. Instead of spending endless hours in trying to design the solution, it seems interesting to start with the solution and break it apart into the pieces that make the solution effective, in order to understand how it addresses a problem. And then utilize that knowledge to construct a desired outcome out of those pieces.

It is also important to note, that not only did this project highlight this unique approach to the design process, it also provided a much more organic experience to the development of a solution. There where sequential steps in the process, but in some cases steps where repeated, expanded, discarded or used out of sequence, which suggests that while the design process structure can be successful in the order that its usually practiced, its by no means the only way to achieve a desired result.

Additional Material \text{Ad}

References

Arboleda, Ana. Wang, Yongyi. Shelley, Mack C., 1950-Whalen, Donald F. 'Predictors of Residence Hall Involvement" Journal of College Student Development, Vol 44 No.4 (2003): 517-531

Astin, Alexander W. 'Student Involvement: A developmental Theory for Higher Education" Journal of College Student Development, Vol 40 No.5 (1999): 518-529.

Belk , Russell W. 'Possessions and the Extended Self" The Journal of Consumer Research Vol. 15, No. 2 (1988) 139-168

Brougham, Ruby R., Zail , Christy M., Mendoza, Celeste M. and Miller, Janine R. 'Stress, Sex Differences and Coping Strategies Among College Students" Current Psychology, Vol 28 No.2 (2009): 85-97.

Clark, Marcia Roe 'Negotiating the Freshman Year: Challenges and Strategies Among First-Year College Students" Journal of College Student Development, Vol 46 No.3 (2005): 296-316

Gordon, Cheryl F. Juang, Linda, & Syed, Moin 'Internet Use and Well-Being Among College Students: Beyond Frequency of Use" Journal of College Student Development, Vol 48 No.6 (2007): 674-688

Ideas to help build stronger broader social networks in academic departments

Hansen, William B., Altman, Irwin 'Decorating Personal Space, A Descriptive Analysis" Environment and Behavior, Vol 8 No. 4, (December 1976): 491-504.

Heilweil, Martin "The influence of dormitory architecture on resident behavior" Environment and Behavior, Vol 5 No.4 (1973): 377-412.

Kaufman, Peter. Feldman, Kenneth A. 'Forming identities in college: A sociological approach" Research in higher education, Vol 45 No.5 (2004): 463-496.

Smith, Rebecca F. & Brakin, Richard K. 'Components of a comprehensive orientation program ' Designing Successful transitions: A guide for orienting students to college, Chapter 4 (2003): 674-688

Swenson, Lisa M., Nordstrom, Alicia & Hiester, Marnie. 'The Role of Peer Relationships in Adjustment to College." Journal of College Student Development Vol. 49 No. 6 (2008): 551-567.

Tinto, Vincent."Colleges as Communities: Taking Research on Student Persistence Seriously" The Review of Higher Education, Vol.1, No. 2, (1998) 167-177

Vasti Torres and Susan R. Jones and Kristen A. Renn. 'Identity Development Theories in Student Affairs: Origins, Current Status, and New Approaches." Journal of College Student Development Vol. 50 No.6 (2009): 577-596.

Adding Dimension:

Appendix

Hey!
FRESHMEN!

GET A $10* **ITUNES** OR **AMAZON** GIFT CARD

MUST-BE

• **18 to 21Years old**
• **Living in dorms**

✴ Participants recieve compensation upon completion of entire segments of study procedure.

PARTICIPANTS NEEDED

Graduate Student research study is seeking freshman year students living in college housing, between the ages of 18-21. Study is seeking to understand how incoming college students use their digital possessions (MP3's, eBooks and Movies), the sources they use to get them and how they interact with them.

Email if interested
Research Study
cmu_study@designloom.com

Email if interested
Research Study
cmu_study@designloom.com

Email if interested
Research Study
cmu_study@designloom.com

Email if interested
Research Study
cmu_study@designloom.com

Email if interested
Research Study
cmu_study@designloom.com

Email if interested
Research Study
cmu_study@designloom.com

Email if interested
Research Study
cmu_study@designloom.com

Email if interested
Research Study
cmu_study@designloom.com

[Appendix 1]

Recruitment Materials

Ideas to help build stronger broader social networks in academic departments

Interview question form

Design

01. Interview NO.

Questions.

About Possessions

1. Do you own any music, movies or books?
Books Yes ☐ No ☐
Music Yes ☐ No ☐
Movies Yes ☐ No ☐

2. Did you bring any of these to school with you? Yes ☐ No ☐

3. What is the format of your books, movies, and music that you own?
Books Digital ☐ Physical ☐ Both ☐
Music Digital ☐ Physical ☐ Both ☐
Movies Digital ☐ Physical ☐ Both ☐

4. What is the format of your books, movies, and music that brought with you?
Books Digital ☐ Physical ☐ Both ☐
Music Digital ☐ Physical ☐ Both ☐
Movies Digital ☐ Physical ☐ Both ☐

5. What is the percentage of Digital vs. Physical in your current personal library?
Books Digital ☐ Physical ☐
Music Digital ☐ Physical ☐
Movies Digital ☐ Physical ☐

6. How many of each did you bring with you? Books ☐ Music ☐ Movies ☐

7. What other type of personal possessions did you bring with you?

1 / 4

FOR RESEARCHER ONLY _ DON NOT COMPLETE			
PARTICIPANT			VALUE: ○ ○ ○ ○ ○
DATE:	TIME:	SCHOOL DAY:	
NOTES:			

111

Ideas to help build stronger broader social networks in academic departments

NO.

8. Out of the things you brought with you, which one is your most prized possession? and why?

9. Is this possession kept public, or is it kept private? if public where?

About Identity

10. Do you think possessions can convey a sense of someone's personality or identity? If yes, why?

11. Do you think movies, music & books are good indicator of a persons identity?

12. Do you think movies, music & books are good indicator of a persons personality?

13. What do your books say about you?

14. What do your Movies say about you?

15. What do your Music say about you?

16. What do your possessions say about you?

17. What are the phases people go through while they are getting to know someone new?

18. Do you use other peoples possessions to understand their personality or identity? If yes, has this been a sucessful way of identifying specific things about them?

19. What kind of possessions do you use to help you get to understand a person?

20. Do you curate(pro actively choose) what objects are public to people who share your space?

21. Are there any specific possessions you own that people regularly comment on?

About Your Space

22. Did you manage to bring everything you wanted to bring to school with you?

23. What would you wish you had that you couldn't bring?

24. What things did you bring, that you realized you didn't need?

25. Did you plan ahead with any roommate about what each of you would bring?

26. Did you have any conversations about how to set up the space?

27. Where the conversations easy? Was there something you had to compromise on?

28 What have you acquired since you have been at school?

29 What things have you seen from other students that you find strange that they brought ot school

30 How much where your parents involved in your packing process?

31 If you could use a catalog to customize your dorm room furniture and decorations would you use it?

32 How Much effort did you put into decorating your home bedroom, what kind of things did you have up on your walls.

Adding Dimension:

02. Tour

NO.

Floor plan and Experience

Please draw a sketch of your room/apt/living space and label the mayor areas of the space, along with how you use these areas. Number each of these separate areas in order of most important to you to least important. Add any notes in the space bellow that you feel might be important about your space.

113

Ideas to help build stronger broader social networks in academic departments