ABSTRACT

BOWERS III, HUGH HAWES. Dimensions of Learning: Community College Students and Their Perceptions of Learning Spaces. (Under the direction of Dr. Tuere Bowles.)

Classrooms, both by design and by accident, have been used to teach and reinforce certain ethics and ideologies. Examining the actual structures of a classroom one can recognize forces often hidden or considered background revealing how students and instructors together are culturally bound by educational spaces. Considerable research exists that examines the many challenges community college students face, but work that explores how their classroom environments affect learning is limited. Much of the scholarship regarding learning spaces is still rooted in the physical environment. Research of the material culture of classrooms and how students and instructors culturally construct their learning spaces represents an opportunity to expand our understanding of how classrooms function.

The objective of this research was not to determine what the ideal physical environment was for teaching and learning, rather it was to examine how instructors and students might take the classrooms they already occupy and reconstruct those into effective learning spaces. The three research questions that guided this study were: 1) How do community college students construct their classroom spaces? 2) How do community college students compare their classroom spaces to their learning spaces? 3) What strategies and methods would allow community college students to make community college classrooms into learning spaces?

In a qualitative study, fourteen community college students were asked to share their perspectives on classrooms. In hour-long interviews, participants compared their classrooms and the places where they preferred to study. Grounded theory methodology was employed to analyze data from the interviews and develop theoretical statements about community
college classrooms. Analysis also borrowed from Critical and Post Modern perspectives, the work of Henri Lefebvre and Pierre Bourdieu in particular, to reveal the lines of power in classrooms.

Findings developed through five theoretical statements. Classrooms are made for classes, not for students. Entering a classroom, instructors and students occupy roles that have been culturally established and embedded within the place itself. The power to construct a learning space is the power to learn. Before students can reconstruct their classroom spaces, they must have an awareness that classrooms can be changed as well as ways that might happen. Students and instructors enter their classes with an implicit understanding of how they will act and interact without even acknowledging such an agreement exists.

The grounded theory that emerged was that classrooms are negotiated spaces where the terms of usage have already been established before students or instructors have even entered the room. In order for negotiations to occur within classrooms over their usage, students must recognize that such discussions can occur. The research concluded that the power of the classroom is cultural. While generally supportive of the literature, the findings here suggest that instead of changing the physical environment of the room to change perceptions, it may be better and more effective to alter the culture of the classroom so that students feel a greater sense of agency and have more power over their learning.
Dimensions of Learning: Community College Students and Their Perceptions of Learning Spaces

by
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DEDICATION

Cheryl and Annika are the reason this exists. Now that it is over I dedicate myself to being a kinder, gentler husband and father.
BIOGRAPHY

I’m really Beau, not Hugh. I have chopped a lot of wood and carried a lot of water to get here. I’ve worked on boats, built houses, and cooked in kitchens before, during, and after attending way too many classes. At one point I thought it might be fun to stand at the front of a classroom instead of sitting in the back. It turns out that was a pretty good idea, at least for me and I hope for my students. Since 1991 I have taught history and then anthropology at Central Piedmont Community College. In 2003, the folks at CPCC were kind enough to offer me a full time position which I intend to hold until I am no longer able to function.
ACKNOWLEDGMENTS

First, thank you to my participants. Without their willingness to share their experiences there would be no research. Thank you to my committee, whose wisdom and patience were greatly appreciated throughout the process. I’m grateful to Sue Barcinas who helped straighten out both theory and method. Colleen Wiessner inspired me to follow this path and although she was not able to see it finished, her insights are wound throughout and I appreciate her spirit and generosity. Thank you especially to Tuere Bowles, the chair of my committee and the reason you are reading this. Her kind and steady support started me on this process and kept me going right to the end. If this document is at all a success, much of it is due to her efforts. Any and all failings are mine.

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CHAPTER 1: INTRODUCTION

“...to teach is to create a space in which the community of truth is practiced... I need to spend less time filling the space with data and my own thoughts and more time opening space where students can have a conversation with the subject and with each other" (Palmer, 1998, p. 120).

In The Courage to Teach (1998) Parker Palmer urges educators to step outside the comfortable confines of their subject knowledge and consider not just the “stuff” of their discipline but the “space” in which it is delivered. Space in this regard is more than just a physical location; it is the intellectual, social, and emotional room we require to develop as individuals. As content experts, instructors often fill classroom spaces with material they believe students need to know but leave little room for the learners themselves. The purpose of this research was to determine how community college students make spaces for themselves and their learning in classrooms. The goal was to develop a working theory that will allow both instructors and students to culturally construct better community college classrooms.

Considerable research exists that examines the many challenges community college students face, but work that explores how their classroom environments affect learning is limited (Harmening & Jacob, 2015; Temple, 2009; Devlin, Donovan, Nicolov, Nold, & Zandan, 2008; McConaghy, 2006). Much of the work regarding learning spaces is still rooted in the physical environment and is design oriented, examining how architects and builders construct school structures and how these can be made more accommodating to learners (Ashburn, 2007; Chism, 2002; Nielsen & Moos, 1978; Dunnagan & Christensen, 2000). Elementary and secondary education attracts the most attention of designers, but recently
higher education has committed more resources to classroom design (Gill, 2009; Richardson, 2005; Dittoe, 2002). These studies represent a growing concern for creating more effective spaces, but they are more interested in potential student interactions than they are in actual students (Goodyear, 2000; Ching, Levin, & Parisi, 2004; Strange & Banning, 2001). In other words, designers build first and ask questions later (Devlin, Donovan, Nicolov, Nold, & Zandan, 2008; Chism, 2002).

Using qualitative methodology, primarily interviews and observations, the goal of this study was to develop a theoretical understanding of strategies students employ as they both shape and are shaped by school environments. The goal was to construct a working theory of how classroom spaces operate in the hope that users of community college spaces, namely instructors and students, can create a more welcoming and effective environment for learning. This opening chapter introduces the rationale for the study and the questions that guided the research. Next, the significance of this research, not only for the researcher and participants, but for all designers and users of classrooms spaces is addressed. Finally, key terms and concepts used throughout this study are introduced and defined.

Statement of the Problem

Over a century ago, Maria Montessori recognized that children learn best when they feel comfortable and in control of their surroundings (Haskins, 2010). She changed classroom spaces so that children were free to investigate their environment. Instead of the room dictating activity, students controlled their actions and adjusted the room to fit their needs and visions. These ideas eventually influenced not only how teachers designed
instruction but how builders designed grade school classrooms (Chism, 2002). Innovative classroom designs for children, however, did not translate to higher education. In fact, the arrangement of most college classrooms continues to follow patterns that would be familiar to students from the middle ages with students arrayed in rows of chairs facing the front of a room where instructors and material are located. In present-day classes, computer consoles and projectors have replaced lecterns and while powerpoint slides and video clips add some variety and visual punch to presentations, lectures still dominate and students remain spectators to their own learning. Students in most college classrooms are not free to explore but are expected to passively receive instruction in a system Paulo Friere (1970/1997) referred to as the "banking model of education" where teachers deposit knowledge and then withdraw it during tests and assignments.

Recently, efforts have emerged to redesign college classrooms where students, not the instructors, are the focal point of the room (Rullman & van den Kieboom, 2012). Flexible spaces allow students, instructors, and materials to come together in more creative ways. Research into innovative room and teaching designs, however, is limited. Studies that examine the material culture of classrooms and how they shape student attitudes and behavior are almost non-existent. Instead, much of the work on classroom design focuses on the work of the designers themselves and is very functional in nature (Butz, 2002; Devlin, Donovan, Nicolov, Nold, & Zandan, 2008). In other words, designers are more concerned with the practical use of spaces than they are in the uses that cultures built into spaces and how they affect the people in them (Chism, 2002; Strange & Banning, 2002; Wilson, 2000).
What studies there are on student attitudes in classrooms tend to focus on efficiencies and comfort and leave questions about how different spaces affect learning unasked (Turpen, Finkelstein, & Pollock, 2009; Tom, Voss, & Scheetz, 2008).

**Purpose of the Study**

The purpose of this study was to determine how community college students make spaces for themselves and their learning in classrooms. The research questions that guided this research all related to the cultural construction of space and how it is we understand our place within given environments. In essence, this research sought the relationship between the physical and ideational worlds in classrooms and how they intersected for students. We build schools and classrooms for learning, but is that where learning occurs? How can we know? The goal of this study was to ask questions that get at how students relate to the physical environment of their classrooms.

The first research question was **how do community college students construct their classroom spaces?** Participants in the study were asked to relate where it was they learned and to describe the settings in as much detail as possible. What made a particular location good or bad for learning? How did they situate themselves into those spaces? The second research question asked **how do community college students compare their classroom spaces to their learning spaces?** Participants were asked to explain the similarities and differences in their learning spaces and their classrooms and to develop an explicit understanding of how their learning operated in different spaces. The third research question asked participants to carry their understanding forward by asking **what strategies and**
methods would allow students to make community college classrooms into learning spaces?

Given the subjective nature of the questions, qualitative methods were employed to gain insight into the experiences and perceptions of students. Interviews with open-ended questions allowed participants to work out their own understandings as they responded to questions. The interview format also built in flexibility so that interesting comments were pursued through more focused questioning. Photo Voice methods were used to aid student descriptions of classrooms and learning spaces. Participants were encouraged to take photographs and bring them to interviews as guides for the discussion. Grounded theory methodology (GTM) was employed to analyze data gathered in the interviews. Using GTM, participant responses were carefully coded to identify themes which were then organized into categories and finally into theoretical statements that provided conclusions regarding student experiences in community college classrooms.

Although Grounded Theory is often considered theoretically neutral (Glaser & Strauss, 1967/1999), this research also looked to Critical and Post Modern theories to provide some elements of analysis. Derived from Marxist philosophy, Critical Theory figures predominantly in discussions of the cultural construction of space and was used here to help establish a philosophical and theoretical framework. LeFebvre (2003), Soja (1989), and others have long recognized that space is not empty, nor is it neutral (Tuan, 1974; Hubbard, Kitchin, Bartley, Fuller, 2002). Postmodernists, like Foucault (1973) and Bourdieu (1984), also note the power built into spaces and recognize that objects and spaces carry with them
cultural connotations that can affect behaviors and attitudes. Central to both Critical Theory and Post Modernism is the understanding that power defines all relationships (Merrington, 1978; Foucault, 1984). Asymmetries in power can be found along racial, class, and gender lines and are built right into the structures of a culture (Bourdieu, 2003). In this light, classrooms are structures where lines of power converge, drawing students, instructors, institutions into the webs of power woven throughout a culture. Part of the analysis, then, considers the material culture of classrooms, how physical spaces represent and manifest social realities.

Schools as institutions form part of the discourse over power that all societies have and so reflect not only political, economic, and cultural realities, but also represent the ideal forms those societies project of themselves. Setha Low (2003) notes that “the production and reproduction of hegemonic schemes require the monopolization of public spaces in order to dominate memories” (p. 22). Classrooms, both by design and by accident, have been used to teach and reinforce certain ethics and ideologies. Examining the actual structures of a classroom one can begin to recognize forces often hidden or considered background revealing how students and instructors together are culturally bound by educational spaces (Dittoe, 2002).

Power may be built into places like classrooms, but those places do not necessarily have power over us (Foucault, 1984; Low, 2003). Schools reinforce cultural norms but they also provide one of the few spaces where those ideas can be exposed and questioned. Deconstructing the elements and meanings of classrooms makes it possible for students and
instructors to question the power built into classrooms and to culturally construct new classrooms in the same spaces. Working together, students, instructors, and researchers can expose and challenge ideologies hidden in classrooms and develop new ideas about those spaces and how they might be used.

**Significance of the Study**

This study represented an attempt to develop initial discussions with community college students and understand how they culturally constructed their learning spaces, a topic little discussed in the literature. There are many studies that examine the material aspects of classrooms, primarily through the lens of design. An abundance of research also details the culture of classrooms, with the focus on the traditional roles social forces play in the lives of students, particularly issues such as socioeconomic status, gender, race and ethnicity, etc. Material culture of classrooms, however, is largely absent in the research. The studies that do examine material culture of classrooms are focused on kindergarten and elementary schools and building learning environments for early learners (Hjörne, van der Aalsvoort, de Abreu, 2012; Säljö, 2012, Haskins, 2010). Adult learners, however, especially those in community colleges, have been ignored thus far in the literature. The hope was that this study was not an outlier but could serve as an early entry into a dialogue that grew and evolved into a deeper understanding of how instructors and students create and use community college classroom spaces. The objective of this research was not to determine what the ideal physical environment was for teaching and learning, rather it was to examine how instructors and
students might take the classrooms they already occupy and reconstruct those into effective learning spaces.

Theoretically, this study moved research towards a recognition of the material culture of classrooms. Research on classroom spaces primarily focuses on the material (Chism, 2002, Tom, Voss, & Sheetz, 2008, Strange & Banning, 2001) while discussions of classroom culture revolve around psychological and social issues (Panofsky and Bogad, 2011; Quinn, Poirier, Faller, Gable, & Tonelson, 2006; Smith, 2007). The goal of this study was to recognize a material culture of rooms that sought to identify how the physical and the psychological and social were manifested in classroom spaces. Some studies examine the role of campus culture on learning, but none have gone inside a classroom with the students. This study went with students into their classrooms to get a sense of what they see and feel in their classrooms in their own words (Harmening & Jacob, 2015; Temple, 2009; Rullman & van den Kieboom, 2012).

The primary stakeholders in this study were community college students. The goal of this research was to find a way to engage students in discussions about classroom spaces. This meant asking students how they felt about their classrooms, a question which does not seem to be asked very often (Panofsky and Bogad, 2011). Participants of this study were encouraged to offer critical perspectives of their classrooms and the hope was their voices would be added to discussions about classroom spaces that are normally dominated by educators and architects (Chism, 2002, Tom, Voss, & Sheetz, 2008, Strange & Banning, 2001). Instructors and administrators are also stakeholders. While their voices are not heard
in this study, it was hoped that the discussions started here could expand to include them in future research. Instructors could open up their classroom spaces and engage with students to organize rooms together to best fit the needs of the class. Administrators could actively promote engagement between instructors and students by encouraging dialogue about classrooms. By culturally tearing down classrooms, all involved in their use can see what they are made of and then reconstruct them in ways that offer greater control over classroom environments for everyone and better opportunities for learning (Moos, 2002).

**Definitions of Terms**

Terms and concepts employed throughout this study that require explanation are listed here in alphabetical order. These terms are also discussed at length in the text, but are listed here for easy reference.

**Agency**

Agency is defined here as the power one has over one’s own actions. While philosophers continue to debate the relationship between actions and intentions, in this study agency was used to denote conscious decisions and actions as described by participants (Schlosser, 2015).

**Critical Theory**

Developed from Marxist thought, Critical Theory arose from the work of scholars collectively referred to as the Frankfurt School. Owing to its Marxist roots, Critical Theory argues that inequalities permeate all capitalist societies and that these inequalities are often masked so that individuals, especially those who have less power, are often unaware of them.
The goal of Critical Theory is to reveal hidden inequalities and provide those without power the knowledge and ability to change the ideologies that allow those imbalances to exist.

Leading scholars of Critical Theory include Theodor Adorno, Herbert Marcuse, and Jürgen Habermas (Ingram, 1990; Macey, 2000).

**Grounded Theory Methodology (GTM)**

Research method in which interviews are progressively coded and analyzed according to themes that emerge from the data. GTM does not test theories but builds them from the data through analysis (Glaser and Strauss, 1967/1999; Charmaz, 2008).

**Material Culture**

Material culture is a concept found extensively in anthropology, particularly archaeology (Trigger, 1989). Anything used or created by people is considered their material culture. The understanding is that in the manufacture and use of objects, individuals embed items with their culture; their values, traditions, customs, beliefs, etc. In turn, the objects come to represent the culture to any users and not only reinforce certain attitudes and behaviors, but also create them. In this study, classrooms and all the objects in them represent the material culture of students and instructors who occupy the rooms.

**Photo Voice**

An interviewing method in which photographs, taken by participants, are used to prompt and guide dialogue. Photo Voice is a method often adopted when participants are asked to convey detailed feelings and perceptions about specific locations, people, or events that may be omitted. Photographs allow interviewers to ask directed questions about
elements in the photographs that may not have entered the dialogue otherwise and enable participants to voice through the photographs what might have been otherwise omitted.

Place

A specific space. A location that has been invested by an individual or set of individuals with an identity, such as a particular school or classroom.

Space

In this study, space refers to both the physical location individuals occupy and the cultural interpretations of that location. For example, in the case of a classroom, it is a room like rooms in many places with chairs and tables, but its location within a school invests it with a functional and symbolic identity that shapes how individuals inhabiting that space will behave and feel.

Summary

The central theme and great hope of this study was that education still has the duty and the means to challenge assumptions and ideologies of the larger culture. Schools may reinforce cultural norms, but they also provide spaces where those ideas can be exposed and questioned. Paolo Freire (1997) noted that education is not neutral but either serves dominant ideologies or challenges them. Educators must recognize that the political and social values of our culture are not only in their lessons and language but also in the very spaces they use to teach. Once the power built into classrooms is acknowledged, instructors and students may reconstruct their educational spaces to better suit their needs. The ultimate aim of this study
was to unmask at least some of the power built into classroom spaces and offer it to students, giving them the opportunity to take control of learning spaces for their own needs.
CHAPTER 2: LITERATURE REVIEW

The purpose of this research was to determine how community college students made spaces for themselves and their learning in classrooms. What follows is a discussion of the scholarship related to the study of classroom spaces and students. In the current literature, no single study addressed all of the issues this research explored. Consequently, this review drew from a number of sources and formed a synthesis that provided a scholarly framework used for analysis of the findings. The first section of this review is a general treatment of space that considers theoretical models of how we conceive, construct, and inhabit both physical and cultural spaces, particularly classrooms. Of particular importance to this research was the work of Critical and Post Modern theorists, a theme that runs throughout this work. Finally, the discussion considers critical, spatial theories that place understandings of power into spaces and ties people, places, and activities together into a model that recognizes the physical and psychological realities that combine to create classroom spaces.

Space and Place

What is space? Is it simply where we are or is there more to it? When we occupy a location, do we alter it? Does it alter us? How? These questions have as much to do with perceptions of space as they do the spaces themselves. This research looked at space from the inside out: space is less an external, physical reality that shapes our behavior than it is an internal construct that individuals lay over the existing world to make sense of it. Instead of examining the literature of physical spaces and architecture, the focus of this section is where
our understandings of the cultural construction of space first arose and how they have evolved.

Geographers and other spatial theorists distinguish between space and place (Soja, 1989). Generally, space is considered a universal experience, whereas place stands for the local and specific. As Peter Taylor (1999) argues, “space is everywhere, place is somewhere” (p. 10). As an example, one can speak of classrooms as spaces with the understanding that everyone attends classes somewhere and that all of these spaces share certain characteristics, or one can discuss a particular classroom as a place where one individual attends classes and which reflects the specific context of that person, the school, the class, the local culture, etc. From a cultural perspective, space can be considered a collective experience where a society defines itself and its locations and provides meaning for where it is (Low, 2003). Places, on the other hand, are defined by individuals and can be viewed as meanings that have found material form within one individual in a specific location (Rodman, 1992). The goal of the following review will be to move from the general concept of space to its specific application to particular places, in this case, community college classrooms.

**Classical Space**

Original conceptions of space as a separate entity with its own properties arise from the first geometricians. Devised by Euclid and refined by generations of successors, early geometry held that space was there to provide the basic structure for the physical world (Hubbard, Kitchin, Bartley, & Fuller, 2002). Although it could be measured along three dimensions, space was a void, an “empty zone, a container indifferent to its content”
(Lefebvre, 2003, p. 206). Activities could be plotted in these spaces, but space itself was viewed as a passive placeholder; matter was what mattered. A couple millennia after Euclid, Isaac Newton expanded essentialist notions of absolute space. Stretched to infinite proportions, space became Space. Yet for all its vastness, space was still a static void; a neutral background to the more important activities of matter which governed all the operations of the universe through the forces of gravitation (Hawking, 1988). Geography emerged as a field around this time and adopted both the scientific principles and absolutist notions of the period. Early geography followed classical geometry. Even as they sought to locate people within their places, geographers characterized spaces as passive sites where “objects are located and events occur” (Hubbard et al., 2002, p. 13).

With the publication of his Special and General Theories of Relativity in the early twentieth century, Einstein turned previous perceptions of space on their heads (Morrison & Morrison, 1987). In Einstein’s conception of the universe, space was no longer a Euclidean emptiness. Instead, he posited the existence of space-time with multiple dimensions and dynamic properties (Edwards & Usher, 2008). Space was not neutral, but was an active participant in forming the universe. It stretched and contracted, warped and bent, and could even fold upon itself (Hawking, 1988). No longer absolute, the presence and properties of space were directly related to the activities of everything else. Space was now both cause and effect. To understand its role we now had to uncover the relationships between objects and the space they occupied. Everything, including space, was related to everything else. Stripped
of a static and absolute universe, all of science, and by extension all of humanity now had to grapple with the relational aspects of knowledge.

New understandings of physical space led to new philosophies of space. In *Being and Time*, Martin Heidegger (1962) argued for a new framework for understanding space. Terming our existence as “Being-in-the-World,” Heidegger held that “physical spatiality does not occur independently of the human understanding, but it means that the human only has access to physical space through his understanding of it” (Wollan, 2003, p. 36). In other words, space is not the absence of matter, but is the presence of social and cultural forces. Space is far from neutral; instead it is a material culture where political, economic, and cultural forces all intersect (Hubbard et al., 2002). We are both part and product of space, just as it is both part and product of us. To separate space from our existence is to create an artificial distinction that confuses the facts of objective space with our experiences of it.

Equipped with new conceptions of space, geographers set out to redesign their field to include people and things in the places they studied (Tuan, 1989).

**Humanist Space**

During the Renaissance and the subsequent Age of Exploration, geographers, many of them cartographers, quantified space with the aim of mastering it (Boorstin, 1985). Explorers set off with incomplete maps, conquering empty spaces, and filling them in. Because those spaces were neutral and empty, the original inhabitants of those empty regions could be moved out and their lands taken (Tuan, 1974). Speculators and settlers felt it was their duty to impose their own visions on what they considered to be virgin lands (Boorstin,
Land was a God-given resource to be turned to productive use; not to do so was a sin. Thus with the help of geographers, Europeans colonized and exploited resources around the world. As a result of their many explorations and encounters, geographers began to question their perceptions of space as static and neutral. In the mid to late twentieth century new conceptions of geography incorporated not just the physical, but the cultural as well. One aspect of this new emphasis in geography was how power mapped onto the landscape (Tuan, 1989). No longer were geographers content to quantify space, they now wanted to understand it qualitatively (Hubbard et al., 2002).

Giving name to this new perception of space, geographers and social scientists employed the term spatiality. Spatiality moves understandings of space away from abstract and essentialist conceptions and looks at how humans produce space through their activities (Crang and Thrift, 2000). Space is no longer empty or passive, but is now an active participant in the production of society (Elden, 2001). Space is now a human construction, part of our material culture (Bergmann, 2006). Because physical environments are now understood as integral to how people act and are acted upon, it is now possible to apply behavioral frameworks to conceptions of space (Sork, 2002). In other words, through the development of spatiality, space has agency.

Space does not operate in isolation, but is part of a social system embodying the culture that creates and occupies it (Tuan, 1989; Sack, 1999). We are not in space, so much as we *are* space and “through our actions, our interactions, we bring about the world in which we then are; we create so that we may be, in our creations” (Richardson, 2003, p. 74).
That is, in studying space we must recognize “the human body as a space that lives in, with and through its environment” (Bergmann, 2006, p. 326). To understand our role in space, we cannot separate ourselves from the spaces we occupy. The spaces we inhabit, both public and private, reflect our culture and either accentuate or mask inequalities often while assuming the façade of neutrality (Gottdiener, 1985). Language, customs, and places all reflect the power, or lack of power, individuals possess. Asymmetries in power, which can be found along racial, class, and gender lines, are built right into the spaces of a culture (Bourdieu, 2003).

Not only do we use space to define ourselves, we use it to define, and in many ways limit, others (Mills, 2006). In every region and every culture, certain locations are understood as desirable and others are to be avoided. Behind the values of a place are not only layers of political and economic decisions but also the moral understandings of a culture (Tuan, 1989). Trash dumps and prisons are located in low-income areas, while high-cost housing can often be found behind large walls and gates (Low, 2000). Not only do these spaces define status, they also help to form identity. Steven Gregory (2003) examined a housing development in New York whose name was synonymous with blight and crime and found that residents there were constrained by both the physical environment and the identity it created for them. In Tokyo, the Burakumin face similar difficulties (Library of Congress Country Studies). Although indistinguishable from other Japanese citizens in appearance, language, or custom, the Burakumin are discriminated against because the region they inhabit has long been the place of crime, prostitution, and garbage dumps. In both cases, spaces were located and built
by those in power for folks in less privileged positions. Once established in certain locations, inhabitants were expected to know their place, both geographically and socially.

Humanist geographers, then, have come to understand that space is plural and that each person or thing that enters a space alters it as well as changing a space’s capacity to affect change in others (Bergmann, 2006). Just as there are multiple spaces, there are multiple geographies in which to understand them (Soja, 1989). For many years, geography was the province of white, male academics from economically and politically powerful countries (Hubbard, et. al, 2002). Now attention has turned to those whose voices have not been heard and discussions focus not only on how spaces are formed but for whom they are created (Low, 2000). In particular, humanist geography has become very interested in how power is built into spaces and how those spaces then shape the cultures that use them (Sack, 1999). To further examine the development and use of power in a society’s spaces, the discussion moves to the works of Marx and their applications via critical theory.

**Towards a Critical Spatial Theory**

From a general perspective, the term critical theory can refer to any view that holds the world at a distance and evaluates how and why it functions as it does (Macey, 2000). Evaluation is what is most critical to any critical theory. Other philosophical perspectives may seek to describe or explain the world but the primary focus of critical theories is to appraise levels of justice and happiness that exist within a society and, as Karl Marx asserted, to provide “relentless criticism of all existing conditions” (Marx & Engels, 2004, p. 28). While it cannot be proven, the first critiques most likely emerged right after the first thoughts
were formed somewhere on the savannahs of Africa. From a historical perspective, that is, working from written documentation, critiques are present in the earliest evidence of writing and some argue that critiques can even be seen in the artifacts of pre-literate societies (Renfrew, 1987). Systematic criticism, however, does not fully emerge until the arrival of philosophy in Greece in the classical era of Socrates, Plato, and Aristotle (O’Connor, 1999).

Yet not all critical thoughts or theories are considered critical theory. Critical theory refers to a specific movement in western thought that critiques society based on Marx’s conception of political economy (Ingram, 1999). The critique in critical theory is about evaluating capitalism and its pervasive influence on human freedom and happiness. Criticality, on the other hand, can refer to any number of critiques, only some of which qualify as critical theory. Critical thought, which has become a touchstone in education, relates more to the ability of students or its lack to move past the content of a lesson and understand its place within a broader context of other learning and experiences (Merriam & Caffarella, 1999). The larger context may include Marxist conceptions of power and capital, but more often it is contained within the student’s own understandings of their place in the world.

**Origins of Critical Theory**

Critical theory marks its beginning with Max Horkheimer’s publication of “Traditional and Critical Theory” in 1937 (Ingram, 1990). Horkheimer published his article in the journal of the Institute for Social Research in Frankfurt which despite its history of dislocations and removals from Geneva to New York and back was ever identified as the
Frankfurt School (Wiggershaus, 1995). Although critical theory soon spread beyond the confines of the Frankfurt School and incorporated many variations of Marxist thought, every variation of the theory adheres to Horkheimer’s original mission for it, namely to critique the values and beliefs of capitalist societies and examine how they both aid and detract from human freedom (Horkheimer, 2004). In developing the basis for critical theory, Horkheimer melded Immanuel Kant’s critical stance towards reason with Marx’s critique of capitalism (Ingram, 1990).

Kant was instrumental in changing the moral and rational structures of western thought (Ameriks, 1999). In Kant’s day, philosophical arguments centered on the nature of reason, which was assumed by all sides to be essentially passive; our thoughts were merely a reflection of a world that existed independently outside of us (Kant, 1965). Kant, however, argued against objectivist conceptions of reality that limited humans in their thoughts and behaviors. Instead, he posited that each person is a free, rational agent who inhabits a community that is also potentially free and rational. Freedom was and still is a radical ideal, and Kant understood that many individuals might not accept their freedom. He also realized that irrational practices of greed and self-preservation would get in the way of equality and lead to some individuals dominating others (Ingram, 1990). The key for Kant was moving individuals out of objectivist views of reality and recognizing that they themselves are responsible for evaluating and understanding what is real (Ameriks, 1999).

In Kant’s view, reality was not an object but reason was (Kant, 1965). In other words, reason, which most had assumed was an innate and unchanging property, was for
Kant highly malleable (Ameriks, 1999). The world did not change, so much as our rational responses to it did. Kant, therefore, cleared the way for later thinkers, including Marx, to determine how reason was acted upon (Ingram, 1990). Before Marx, however, was his mentor, Georg Wilhelm Friedrich Hegel. Hegel developed the framework for understanding how reason developed, namely history (Rockmore, 1999). Rationality changes over time and human understandings of knowledge and identity are shaped not by an objective reality but through continuously shifting social and political contexts (Ingram, 1990). Charting changes to reason led to Hegel’s conception of the dialectic as a force through history. Ideas oppose one another in progression, with each new idea giving rise to its opposite. Together the two ideas merge to form another new idea. Reason, Hegel argued, flows in a dialectic from the beginning of time to the present moment, changing to fit our relationships to the world and to each other (Rockmore, 1999).

For Hegel, each shift in reason leads to greater freedom for humanity. The dilemma for Hegel was that in spite of the continuous movement of the dialectic towards greater freedom, humans still were not free. In fact, Hegel argued, freedom and domination were opposites unified not only in their opposition, but also through their identity (Germino, 1972). Hegel insisted that for many individuals, the enjoyment of one’s own freedom comes through the ownership of another’s freedom (Ingram, 1990). Hegel recognized that this relationship enslaved both sides and that as long as it existed, humanity would never truly be free, a theoretical construction that heavily influenced Marx. Hegel posited an end of history in which the dialectic between freedom and oppression ended, but such an outcome required
a spiritual awakening among all humanity where our individual desires matched our collective needs. In particular, Hegel looked for the time when the universal need for freedom would overcome any personal need to dominate others (Rockmore 1999). Hegel believed this could only happen through the power of a state run by an enlightened ruler (Germino, 1972). His student, Karl Marx, disagreed.

**Marx**

Marx picked up from Hegel how social and historical forces shaped human action and behavior, but where Hegel had seen ideas as the driving force of history, Marx argued that history in the form of economic forces drove ideas. In this way, Marx claimed to turn Hegel’s dialectic “right side up” (Marx & Engles, 2004). Instead of looking at how reason reflects the dialectical force of ideas, Marx sought the origins of ideas in the relationships created by material production (Ingram, 1990). The dialectic was not a struggle between opposed ideas, but represented a clash between economic classes and how “the ideas of the ruling class are in every epoch the ruling ideas, i.e. the class which is the ruling material force of society, is at the same time its ruling intellectual force” (Marx & Engles, 2004, 64).

Like Kant and Hegel, Marx adhered to the ideal of human freedom. Marx also struggled, as his predecessors did, to understand why freedom proved elusive. Marx found his answer examining material relationships throughout history. While he analyzed economic systems from every period, Marx focused primarily on the era in which he lived and the establishment of the dominant material relationship of his and our time; capitalism. With the rise of factories, mass production, and global markets, new human relationships emerged that
were marked by alienation (Ingram, 1990). In factories, workers became part of long chains of production that removed them each other and from the products they produced (Marx & Engels, 2004). Global markets further increased distance between producers and consumers so that one no longer knew the other. Alienated from one another, workers as both producers and consumers lost any sense of kinship with one another. Where they might have once cooperated to achieve common goals, they now competed for scarce resources (Berlin, 1963).

With the rise of markets, value was equated not with intrinsic qualities but with market exchange (Ingram, 1990). The profit motive overrides all other considerations in capitalism and all things, including people, became commodities whose value was determined by the laws of supply and demand (Germino, 1972). Marx labeled this final form of alienation in which individuals are separated even from themselves commodity fetishism (Ingram, 1990). In capitalist systems, the pursuit of wealth took the place of individual striving for self-worth and meaning. As dehumanized commodities, we sought more commodities to establish our value in a market-driven world and we defined ourselves not by what we produced, but by what we consumed.

Like his mentor Hegel, Marx optimistically looked toward an end of history where humans would gain their freedom. Marx, however, did not see the end of history emerging logically and peacefully through dialectic of ideas. Rather, Marx envisioned a more violent economic struggle between classes. The bourgeoisie, those who owned property and wielded power, would not easily let go the reins. Only revolution could free the workers from
capitalism and allow for the formation of a classless society that would radically alter material relationships and end oppression (Marx & Engels, 1988). Yet, where was the revolution? In Marx’s time, a number of worker protests erupted across Europe, but they all failed to free the workers (Hobsbawm, 1996). In fact, each failed revolt led to greater control for the bourgeoisie and the continued expansion of capitalism. Over time, workers became consumers and so accepted capitalism and in the process became further alienated from each other, from themselves, and even from their desire to be free (Ingram, 1990).

Marx puzzled over why workers accepted conditions that took away their freedom and made them less human. He believed that workers were deluded into believing that their condition was natural and inevitable (Germino, 1972). This belief was an illusion, Marx insisted, an ideology that supported existing economic and political structures and allowed those in power to remain in power (Marx & Engels, 1988). Ideologies were abstractions, things like religions or political theories that explained the world in ways that devalued individuality and personal freedom. Instead of promoting freedom, ideologies created a “false consciousness” that offered individuals paths to a life full of consumer goods in exchange for docility, or as Roger Waters (1975) put it, exchanging “a walk-on part in the war, for a lead role in a cage” (Brookfield, 2005). Ideology perpetuated alienation by substituting human relationships with material ones. In capitalist ideology, happiness was not about freedom; rather it was about accumulating goods. The more people owned, the less likely they would be to challenge the existing system for fear of losing the things they had or might obtain (Berlin, 1963). Marx argued that to free humanity we needed to become critical
of ideology. False consciousness must be exposed and capitalism overthrown (Ingram, 1990). Marx, however, did not formulate a specific critique of ideology; this would be the work for those who followed.

After Marx

Following Marx’s death, his ideas took root throughout Europe. Some saw Marx primarily as a political theorist and worked to emplace his economic ideas by political means. Known as orthodox Marxists, these individuals promoted the active struggle of workers against capitalism (Rich, 1970). The activism of orthodox Marxists like Vladimir Ilyich Ulyanov, who assumed the name Lenin, made them dangerous to governments throughout Europe and led to arrests and expulsions (Riasanovsky, 1984). The economic and political devastation of the First World War, however, weakened governments across the continent and opened the door for orthodox Marxists to promote revolution. Communist parties, touting the political ideals of Marx, rose to prominence in Russia, Germany, Italy, and elsewhere. In most countries, communists struggled not only against capitalism but also against a whole host of political movements that limited their effectiveness (Palmer & Colton, 1978). For example in the 1920s and 1930s Italian and German industrialists supported fascism as a means to prevent communist success which led directly to the rise of Mussolini and Hitler (Bullock, 1971). Russia, however, had limited industrialization and there, even though the working class was small, the communists led by Lenin succeeded (Riasanovsky, 1984).
Once in power, Lenin objectified Marx’s ideals. Orthodox Marxism became “scientific,” promoting practical political solutions to economic problems using five year plans and social engineering (Riasanovsky, 1984). The classless society that emerged in the Soviet Union, however, was no closer to promoting human freedom than the system it replaced. If anything, repression in Russia expanded in the name of Marx and progress. Marxists in Europe, at first encouraged and emboldened by the rise of the Soviet Union, began to express reservations against orthodox Marxism. Georg Lukács (1971) became the first to publicly criticize the Marxism of Lenin and Stalin. He argued for a critical and theoretical reorientation of Marxist thought that moved away from scientific and political policies and towards the idealism of Marx’s original vision which emphasized the individual’s capacity to understand and act upon their own situation without the guidance, or control, of the state (Löwy, 1978). Because the scholars who responded to Lukacs’s call were found primarily in Western Europe, they became known as western Marxists.

**The Frankfurt School**

Western Marxism, sometimes called neo-Marxism, emerged in a number of centers throughout Europe (Macey, 2000). While each “school” developed its own interpretations of Marxist thought, they all shared a humanistic perspective that moved away from direct political and economic action (Ingram, 1999). As western Marxists distanced themselves from Russian Marxism they became known more for academic rather than activist stances. In Germany, a number of scholars strongly influenced by the work of Lukács formed the Institute for Social Research in Frankfurt in 1923 (Wiggershaus, 1995). The Institute,
commonly referred to as the Frankfurt School, initially maintained close ties to Moscow and remained sympathetic to the efforts of Lenin, and later Stalin, to impose a Marxist system in the Soviet Union (Ingram, 1999). In 1931, Max Horkheimer took over as the new director of the Frankfurt School and moved the Institute away from orthodox Marxism (Macey, 2000). Horkheimer brought with him students and scholars, like Theodor Adorno and Walter Benjamin, who shifted the focus of the Frankfurt School towards ideology critique which became the heart of what became identified as critical theory (Ingram, 1999).

**Critical Theory**

Critical theorists identify humans not by their biological or psychological status as beings, but by their potential to be free (Ingram, 1990). Humanity is an ideal that arises from human agency, either through its free expression or by its repression. Focusing on human potential, critical theory is idealistic; it sees beyond present conditions to a better, even utopian, form existence (Horkheimer, 2004). Going back to Marx’s roots in Kant and Hegel, critical theory argues that reality is not objective but is socially constructed (Crotty, 2003). For critical theorists, the *idea* of humanity is more important than the *reality* of being human (Kilgore, 2001). Therefore, to promote freedom we must recognize what our ideas of humanity are and where they come from.

The ultimate ideal for critical theory is freedom. Definitions for freedom, however, are far from universal. Are we seeking freedom *from* or freedom *to*? That is, do we define freedom as the absence of other forces that limit us or is freedom the ability to do as we choose? These concerns add political and economic dimensions to the practice of critical
theory. Situated in the west, critical theorists trained their insight on the governments of Western Europe and the United States. Democracy and capitalism became major concerns for critical theorists. Can the modern welfare state guarantee equal access to basic liberties and rights? What are basic liberties and rights? Given the need for capitalist societies to ensure the ownership of property, was it possible for them to also protect liberty? Most democratic, capitalist societies defined the right to ownership as one of humanity’s most fundamental rights, but this right leads to social inequality. Is the right of the property owner greater than the need of the state to protect the well-being of others? As the French writer Anatole France noted at the time, “the law, in its majestic equality, forbids the rich as well as the poor to sleep under bridges, to beg in the streets, and to steal bread.” Ideology critique, then, turned from direct political action to uncovering the structures of modern states that limited human freedom. The hope and belief was that in the process theory would become a genuine force that would effect change (Crotty, 2003).

Ideologies are social beliefs about the nature of humanity and its place in the world. The problem, from a critical point of view, is that our beliefs are rarely examined or contested but are more commonly “accepted out of ignorance or sheer force of habit” (Ingram, 1990, p. xxiv). The goal for critical theory is to identify and expose ideologies in all their forms and reveal the nature of their origins and assumptions (Horkheimer, 2004). Most difficult of all, critical theorists must demonstrate how a society’s ideas about truth, justice, and happiness are built on false suppositions (Brookfield, 2005). Such ideology critique is founded on the understanding that our view of the world and our experiences in it are
constructions that have more to do with our beliefs than they do with any external, objective reality (Berger & Luckman, 1966). Thus, not only do critical theorists need to uncover ideology, they must also alert others to its presence, many of whom are either unwilling or unable to recognize the presence of ideology (Adorno, 1991).

Antonio Gramsci, an Italian Marxist whose ideas strongly influenced thinkers at the Frankfurt School, developed the concept of hegemony to explain the inability of individuals to recognize ideology (Merrington, 1978). Applied by critical theorists in many areas, hegemony “describes the way we learn to love our servitude” (Brookfield, 2005, p. 93). Hegemony is a product of alienation and emerges as our relationships with other humans are replaced by relationships with things. Like any other product on the market, humans become commodities (Marcuse, 1991). Our values, beliefs, and traditions are all shaped by external forces we cannot control or even identify. Reality is mass produced and mass consumed in things like movies, magazines, and television and we become bound up in our alienation and our consent becomes manufactured like everything else (Chomsky, 1975). The more we consume, the more we lose ourselves and our identities. The individual “ceases to be himself; he adopts entirely the kind of personality offered to him by cultural patterns; and he therefore becomes exactly as all others are and as they expect him to be” (Fromm, 1976, p. 208). As another member of the Frankfurt School, Herbert Marcuse (1991), observed “there is only one dimension, and it is everywhere and in all forms” (p. 11).

In explicit forms of domination, one group forces its ideology upon others by force. In hegemonic systems, alienated individuals submit themselves willingly to the ideologies
that dominate them (Brookfield, 2005). Jürgen Habermas, a protégé of Horkheimer and Adorno and the living heir to the Frankfurt School, promoted the concept of the lifeworld to explain how hegemony defines our lives (Crotty, 2003). Borrowed from the phenomenological tradition, the lifeworld encompasses the cultural background that provides us meaning and yet often goes unnoticed and is generally taken for granted (Therborn, 1978). As we become more alienated from ourselves and our environment, corporations and states take greater control of our environments and so swallow up the lifeworld (Gibson, 2007). Ideology critique is forced from public to private spheres, which given the alienation present in capitalist societies means the voices of those who would speak against dominant ideologies are isolated and disconnected (Therborn, 1978). The lifeworld, however, remains contested space and no matter how dominant an ideology may become, Habermas optimistically argues that humans may still express themselves and gain their freedom by asserting themselves (Gibson, 2007). One part of the lifeworld that offers great promise to critical theorists is the classroom.

**Producing Space**

From the perspective of critical theory, space is where political, economic, and cultural forces all intersect (Hubbard et al., 2002). In his groundbreaking *The Production of Space*, Henri Lefebvre (1991) applied Marxist perspectives to understandings of space, both physical and cultural. He argued that space was not merely a product, but also a producer of societies in general and of capitalism in particular (Elden, 2001). Borrowing from the work of Heidegger, Lefebvre viewed space as both subject and object as well as positing a third
perspective; space as it was lived (Elden, 2004). In this third view of space, Lefebvre unified the material, mental, and social qualities of space and analyzed it as “an object of consumption, a political instrument, and an element in the class struggle” (Gottdiener, 1985, p. 123). Space was not solely a product of capitalism, but was also created by individuals, who could then craft spaces that could either establish or challenge dominant ideologies (Gottdiener, 1985). Workplaces, whether they are factories or home offices, were centers for the production of wealth and so became spaces of social rank and power (Sack, 1999). Like humanist geographers, Lefebvre (1991) recognized multiple spaces these were not the result of multiple voices but the natural tendency of markets to fracture. As workers, we became alienated not only from the means of production, but from the spaces that our society produces (Elden, 2001). Those in power, then, are able to take control of spaces and perpetuate their hegemony (Lefebvre, 2003).

Lefebvre spatialized critical theory, by recognizing that the course of history is not only constructed historically, but spatially as well (Soja, 1989). Space “in addition to being a means of production it is also a means of control, and hence of domination, of power; yet that, as such, it escapes in part from those who would make use of it” (Lefebvre, 1991, p. 26). The problem, he argued, is that while we occupy space, we are often blind to its existence. The “illusion of transparency” emerges from the assumption of the neutrality of space; we all think what we see is what we get. Every society, or more accurately every mode of production, builds inequality and repression into its spaces and so through space creates and maintains all the relationships that form that society (Edwards, Cervero, Clarke, Morgan-
Klein, Usher, & Wilson, 2002). By appearing neutral, spaces “lie in order conceal their origin” and maintain the levers of control without anyone being aware of its doing so (Lefebvre, 1991, p. 81).

For Lefebvre (1991), the liberation of individuals from the fragmentation and alienation of capitalism begins with a revolution of space, or spatial praxis. As Marx noted, revolutions do not come from the outside, but arise from forces within a society (Miller, 1991). For Lefebvre, spatial praxis was about unmasking the inequalities in places and revealing the relationships between the people who construct places and those who use them (Elden, 2004). Any change in a society requires a change in its spaces. Individuals, alienated from one another and their spaces through the forces of capitalism, could use those very spaces to challenge dominant ideologies (Gottdiener, 1985). For spatial praxis to become effective, however, required individuals to break the illusion of transparency of space and to recognize the power hidden within.

**Spaced Out**

Michel Foucault (1984) also recognized that “space is fundamental in any exercise of power,” but his reasoning of how space operated moved diverged from marxian constructs (p. 252). Foucault agreed with Lefebvre that capitalist societies produced spaces and embedded them with means of control so that power ever present. However, unlike critical theorists who identified power with economic control, Foucault (1973) did not see power as a fixed attribute but understood that power is always in transition and represents continuous negotiations among individuals (Hugdahl, 1999). Foucault also rejected metanarratives.
Whereas critical theorists believed in the ultimate emancipation of humanity, a variation on Marx’s classless society, Foucault saw only a continuous evolution of power and relationships with no defined end (Foucault, 1984).

Space was where relationships occurred, and so was a focal area in any negotiation for power (Foucault, 1973). Foucault understood that when we entered spaces we were observed and so altered our behavior to conform to expectations. In fact, society built spaces to allow for particular forms of observation that allowed for control (Foucault, 1979). An extreme example is the Panopticon, a model prison proposed by the utilitarian Jeremy Bentham in the 18th century. In the Panopticon, prisoners in their cells could be observed by guards who themselves were unseen (Foucault, 1979). In such an environment, individuals would always be aware of a watchful presence, even if they are not in fact being observed, and would discipline themselves. Following his utilitarian principles, Bentham believed constant surveillance would encourage prisoners to police themselves which would contribute to their rehabilitation and would work to the greater good of not just the prisoners but society at large. Foucault noted that Bentham’s plan may or may not contribute to the greater good, but it definitely reinforced the power of the system that adopted such a model (Foucault, 1984).

The Panopticon was never built, but Foucault identified many elements of it in spaces that have been built. Public spaces especially demonstrate the power of societies that constructed them (Low, 2000). Surveillance, both explicit and tacit, manifests the power not only of a state that watches its citizens, but the power of citizens who watch each other
(Bourdieu, 2003). When we are observed, we constrain our behaviors and so give up our freedom. The power of and in space is that even when we know we are not being observed, we still limit ourselves because our relationship with space demands it (Foucault, 1979).

Because we are always in space, there is no freedom from the power built into it. What is possible according to Foucault (1984) is the ability to recognize the relationships that create power. To locate and identify power, one must deconstruct the relationships where it emerges. In the case of space, we need to disassemble, figuratively if not literally, the places we inhabit to better understand how and why we build them. Once deconstructed, we can then reassemble space in ways that make power and the relationships that create it observable and accessible to everyone (Edwards et al., 2002). Once exposed, systems can be examined and the legitimacy of social arrangements can be questioned and even altered (Grogan, 2004).

Foucault refused to cede power to architecture. While he admitted that exercise of power is often expressed as control over space, Foucault argued hopefully that “no matter how terrifying a given system may be, there always remain the possibilities of resistance, disobedience, and oppositional groupings” (Foucault, 1984, p. 245). Foucault, however, was not looking for the proletarian revolution of Marxist thinkers, who believed that power could be located in one place, namely modes of production in a society, which allowed resistance to focus on one aspect of society (Smith, 2007). Instead, Foucault argued that power was everywhere and so had to be identified and resisted everywhere (Soja, 1996). One way to do this was to redefine space (Bergmann, 2006).
Proxemics

Culture plays an important role in how we see locations. For any setting there are existing patterns of behavior that we learn as we go along. In the study of places, anthropologists have developed what could be considered linguistics of space. Edward Evans-Pritchard (1940) was among the first to systematically examine the fit between humans and their places. His work among the Nuer in Ethiopia connected their behavior to their surroundings. He recognized that Nuer beliefs and behaviors both shaped and reflected their environment and he noted in his observations and interviews that individuals equated their identity with their place. While his understandings of space were limited, he did set the stage for later ethnographers to explore the relationship between people and the places they inhabit.

Edward Hall (1968) continued the development of a spatial language. Beginning in the 1950s he established the field of proxemics as a means to understand how cultures embed their values into space and time. Using a linguistic model, Hall mapped how humans pattern their relationships. Postulating that all individuals have an inborn sense of personal space, what he called a spatial zone, he examined how we use those zones to convey our thoughts and feelings. Narrowing distances conveys emotion, which can be comforting or hostile, while extending distance communicates formality. The meaning we derive from spatial zones often operates unconsciously, so that our moods affect how we use distance and vice versa (Strange & Banning, 2001). Hall also noted that our spatial zones are as much cultural as
they are individual and that we all inhabit environments that represent both physical and culturally constructed worlds (Hall, 1968).

**Places are People, People are Places**

Hall’s work emphasized non-verbal, spatial cues in human communication. Environmental psychologists recognize that non-verbal cues pass not only between people but the places they inhabit as well (Peponis & Wineman, 2002). Often cues are passed unconsciously so they are absorbed without our ever being aware. Places operate as “behavior settings” where we internalize signals, often left by others, about how to act within a particular location ((Wood, Warwick, & Cox, 2012; Veitch & Arkkelin, 1995). Individuals perceive the conditions of a room without any real conscious thought and as long as a setting meets our expectations it can be considered a steady-state environment, that is, one that does not require our conscious awareness (Peponis & Wineman, 2002). As long as conditions remain steady, we often do not notice our surroundings. Often, like in the case of a classroom, a location may seem innocuous and fail to attract our active attention, yet its presence has an impact on our behavior and mood (Gärling, Biel, & Gustafsson, 2002).

Places have personalities (Temple, 2014; Jessop, Gubby, & Smith, 2012; Nielson & Moos, 1978). We create places not only by altering and building physical structures, but also by projecting our personalities into an environment (Nowell, Berkowitz, Deacon, & Foster-Fishman, 2006). Once established a place maintains a social and cultural presence, a product of the activities and memories of the people who inhabit it (Temple, 2014). Qualities of a place are transmitted from one group or generation to the next and “people can be seen to be
dependent upon the concept of place for their self-identity (and social-identity), just as places are dependent upon people for their identity” (Memmot & Long, 2002, p. 40). Settings influence our behaviors and we behave differently in gyms and grocery stores than we do in schools or churches. Physical environment provides the cues for our behavior, but it is the behaviors of others that shape the place (Rullman & van den Kieboom, 2012; Gallagher, 1993). In classrooms students follow a pattern they inherit from other students, all of whom have long understood, often without even their realizing what behaviors are expected (Strange & Banning, 2001).

Educating Spaces

Classrooms are places our society designs specifically for education. As a culture we invest considerable resources planning, building, and equipping classrooms. Students who sit in these rooms are aware, if only subconsciously, of the time and money spent on the room as well as the motivations behind the expense (Wood, Warwick, & Cox, 2012; Tom, Voss, & Sheetz, 2008). When students enter a traditionally arranged classroom, with desks lined up in rows all pointing towards the front of the room they know what to expect without thinking. They are subjects; passive participants in a classroom that is designed to limit their behavior (Hand, 2014; Veitch & Arkkelin, 1995). In fact, many schools adopt “fortress designs,” with a few, easily controlled entrances, long hallways, and partitioned rooms that allow for easy surveillance (Veitch & Arkkelin, 1995). Such designs are actually similar to those used for prison buildings, so it may not be too much of a surprise that students behave somewhat passively, like prisoners almost, in school environments (Mehrabian, 1976).
Over the last few decades, significant changes in the style and function of schools has led to the inclusion of more natural light, open spaces, and less rigid architecture (Chism, 2002). Surprisingly, open classrooms with free flowing designs, movable furniture, and no set focal points fare no better in promoting learning than more traditional classrooms (Tom, Voss, & Sheetz, 2008). While students admit the flexibility of open designs allows them greater freedom, they also complain of more disruptions and distractions that get in the way of learning (Hand, 2014). It would seem that what is gained in flexibility is lost in control. Even in open environments, students look to their teachers for guidance because they are not used to having control in their classes (Nowell, et al., 2006). Without control, freedom leads to chaos. To change student behavior requires more than altering classrooms physically. Students must feel they have agency, that is, the power to take control of their learning environments.

Research into how students interact with their classrooms, however, is limited. Nearly every study that considers how students relate with the material culture of classrooms focuses on young learners in K-12 settings or in informal locations like libraries or museums (Ruus, Veisson, Leino, Ots, Pallas, Sarv, and Veisson, 2007; Hjörne, van der Aalsvoort. de Abreu, 2012; Säljö, 2012; Haskins, 2010). A few studies exist that discuss students in college environments, but they are concerned primarily with the culture of an entire campus (Harmening & Jacob, 2015; Jessop, Gubby, and Smith, 2012; Quinn, Poirier, Faller, Gable, and Tonelson, 2006). None of these works goes into a college classroom with the students.
Your Place or Mine?

For all the new ideas in design and instruction, classrooms look and perform very much the way they have for decades (Harmening & Jacob, 2015). Most classrooms are still focused on the front of the room where the teacher and, more commonly, the screen with a powerpoint slide are located. Students are still set up in rows and columns with varying degrees of access to the front of the room which allows students to decide how much or how little exposure they want from a teacher who is still more or less confined to the head of the classroom. Changing the space of a classroom matters little if we still have the same idea of place. Before we can understand how we shape and are shaped by places we must acknowledge their presence. Educators, as designers and initiators of classroom activity, must begin the process of identifying the nature of classroom spaces. Instructors need to move beyond steady-state formulations where a room is just a room and observe learning spaces with new eyes (Hand, 2014; Veitch & Arkkelin, 1995).

Instructors act as “place custodians,” providing a cultural link between students and their classrooms (Memmot & Long, 2002). The challenge for educators in higher education is that they are as transitory as their students and so their grasp of place in the classroom is limited. While it is common for K-12 teachers to teach in the same spaces where they have their offices, in higher education we are asked to live double lives. Where we teach is not where we put together our classes. After designing lessons in places we control, namely our offices or homes, we then teach in classrooms where we are but visitors. Often we move from room to room, sometimes even building to building, as we teach our classes. Students
are even less rooted, often running from the parking lot, to class, and then back out again. As a result we have lost the sense of place in our classrooms and have ceded our power to define space (Temple, 2014; McConaghy, 2006).

As teachers and students, we have alienated ourselves not only from our classrooms, but from each other and the work we do. In classrooms we occupy places that do not belong to us sitting with others who are strangers all of which contributes to a sense of alienation (Moos, 2002). Teachers and students need to reorient themselves to each other and their classrooms and acquire the ability to control their learning spaces. They must recognize in each other the existence of a community, one that can work together to construct a classroom (Quinn, Poirier, Faller, Gable, & Tonelson, 2006). Working together to make a learning space, teachers and students become the place themselves and develop “a sense of well-being, coherence, and continuity” that comes from a good fit between people and their environments (Pellow, 1992, p.189).

Given that classrooms in colleges are used by different classes and instructors throughout the day and the week, the time available to form a classroom community is very limited. In addition, other challenges stand in the way of reconstructing classroom places. Students and instructors have long been passive inhabitants of classrooms and in many ways may not want to invest the energy required to change their environment. Operating in familiar ways requires less energy and certainly some folks like it that way. Teachers and students who are bit anxious and uncertain in their surroundings prefer greater structure in their classrooms (Hand, 2014; Chism, 2002; Nielson & Moos, 1978). Teachers can deliver
their lessons without having to adjust to different places, while students arrive, plop down, take notes, maybe even engage actively in the material, but then quickly pack up and leave. It seems to work, why should anyone change? In fact, apathy and disengagement are adaptive strategies that often emerge in places where individuals feel little to no control over their environment (Nowell, et al., 2006). Learning, however, is not a passive experience and if classrooms are to be learning places teachers and students need to control their environment (Freire, 1997).

From a critical, spatial perspective, classrooms can be understood as locations where lines of power intersect. Those who build have the power and the means to design and build the spaces of a society, but everyone participates in the uses of those places, which includes being excluded from certain places (Low, 2000). Language, customs, and places all reflect the power, or lack of power, individuals possess (Tuan, 1989). Schools as institutions are part of the discourses over power societies have and so reflect not only political, economic, and cultural realities, but also represent the ideal forms those societies project of themselves (McConaghy, 2006). Spatial praxis in the classroom uncovers the power built into schools (Temple, 2014). While a great deal of effort has gone into revealing the many lines of power that converge within a classroom with regards to social designations like race, gender, class, and age, seldom are students asked to look at the actual physical environment of the classroom. Examining the actual structures of a classroom allows students to recognize the forces often considered as background and reveals how students and instructors together are bound by educational spaces (Temple, 2014; Dittoe, 2002). It also opens the way for
questions about the power in classrooms and creating new spaces by recasting existing ones (Smith, 2007). If education is about empowering students and promoting emancipation, perhaps the first step in the process would be to free the spaces where education occurs.

Students who are comfortable are also those that are open to new ideas and able to experience them more fully (Wood, Warwick, & Cox, 2012; Nielson & Moos, 1978). Instead of attending to uncertain surroundings, students can devote their energies to the course material (Ruus, Veisson, Leino, Ots, Pallas, Sarv, & Veisson, 2007). To reach that level of comfort, however, requires teachers and students to make themselves uncomfortable at first, which can only arise from a sense of comfort. Instructors can use their position and the traditional sense of power they have in a classroom to deconstruct it. Changes in place can only emerge from efforts that begin within the classroom, not from without (Jessop, Gubby, & Smith, 2012; Eliasoph, 2005). While such efforts begin with the instructor, hopefully they finish with everyone working to construct a new place, a new classroom.

**Summary**

Community college students are a highly diverse population and face many challenges, many of which stem from their limited exposure to college environments. As part of that environment, college classrooms as cultural spaces have received little to no attention as objects of study. The goal of this study was to understand how students constructed learning spaces and how college classrooms met, or failed to meet, their needs as learning spaces. To understand space from a cultural perspective required a more theoretical notion of what space is.
Although theoretical conceptions of space are fairly recent they have undergone significant shifts. Classical theories saw space as essentially emptiness which provided room for things to be. In the past century, scholars have recognized that our own perceptions of a space shape what it becomes as much as what materials are placed in it. Critical and Post Modern theorists have made efforts to understand where our perceptions of space are produced and how it is they evolve. Critical theorists in particular have been interested in how individuals perceive space, not only identifying the sources of spatial conceptions but also seeking the means to inform others of their existence and empowering them to change it.
CHAPTER 3: METHODOLOGY

The purpose of this study was to determine how community college students make spaces for themselves and their learning in classrooms. While considerable research exists that examines the many challenges community college students face, work that explores roles physical environments play is limited. This research examined ways learners in two-year schools adapted to spaces in a community college and how they made places for themselves and their learning. Through interviews and observations I developed a theoretical understanding of strategies students employed as they shaped and were shaped by school environments. With better understanding and theories of classroom spaces, primary users of community college spaces, instructors and students, can create a more welcoming and effective environment for learning.

What follows is a discussion of the approach and methods used in this study. The discussion opens with a consideration of the differences between quantitative and qualitative approaches and why it is that qualitative methods were more appropriate for this work. Next is a brief look at the range of approaches within qualitative research which moves into a discussion of grounded theory, the methodology employed by this study. The section begins with an appreciation of grounded theory’s history and the assumptions that undergird its applications. From theory the discussion moves to the practice of grounded theory as it applies to this research.
Design of the Study

Quantitative or Qualitative?

The first question any social researcher asks in designing a study is whether the approach should be quantitative or qualitative. Each design has strengths and weaknesses and before embarking on any study a researcher should be aware of what these are and how they influence the course of the study and shape the questions asked and how responses are to be interpreted. Quantitative approaches emphasize replicability and generalizability and so are deductive; working from established models and applying them to specific situations (Bernard, 1995). Quantitative methods, then, are well suited for situations where researchers are able to impose control on an environment as they look for a cause to a particular problem, like engineers searching for the source of a mechanical failure (Marshall & Rossman, 2006).

On the other hand, qualitative research works up from gathered data to construct understandings that reflect a wide range of perceptions and interpretations of an event (Creswell, 2007). Instead of controlling environments, qualitative studies recognize that reality is constructed and so seek how individuals craft their realities, seeking the histories, perspectives, and emotions of all individuals involved in a study (Reichertz, 2007). It does not direct subjects, but seeks participants who play an active role in the construction of research (Corbin & Strauss, 2008). Given the nature of this study, the cultural construction of learning spaces, a qualitative approach offered the best fit between research questions and methods.
**Grounded Theory**

Once a researcher settles on a qualitative approach, the next consideration is which methodology should be employed. To encompass the multiple perspectives participants and researchers bring to qualitative studies a wide range of approaches and an even wider assortment of methods have been developed (Crotty, 2006). Although qualitative approaches share a general constructivist approach to understanding reality, each varies in how it describes and interprets reality (Creswell, 2003). The range of approaches and methods is such that even scholars of methodology cannot agree on how to number or classify them (Miles & Huberman, 1994; Creswell, 2007).

Creswell (2007) identifies five basic approaches to qualitative research; narrative, phenomenology, case study, ethnography, and grounded theory. Each approach has innumerable variations and can be applied to any research situation, but each brings different perspectives and techniques into a study and affects how researchers interpret reality. Narrative studies seek to understand the worldview individuals possess through rich description of their experiences. Participants in narrative studies are interviewed at length, often over a considerable period of time to touch on all aspects of their lives in relation to the research. The intense nature of this kind of work often limits the number of participants involved. Phenomenology is similar to narrative research, but instead of looking at a few individuals and their many experiences, this method looks at one or two experience across a number of individuals (Creswell, 2007).
Case studies examine individuals and experiences within a defined setting (Denzin & Lincoln, 2005). In a sense, a case study is an experiment conducted in the field (Creswell, 2003). The goal for researchers in case studies is to understand the entire environment; the people, the location, and the activities and how they work together. Similarly, ethnographies examine how individuals operate not just in one setting, but in an entire cultural system (Bernard, 1995). The challenge for researchers conducting case studies and ethnographies is setting limits broad enough to examine an entire system and yet narrow enough to allow for meaningful and timely analysis. As should be evident, both methods require a high investment in time and funding.

The fifth qualitative methodology, grounded theory, differs in that its primary focus is not on individuals or environments but in producing theory. Although other qualitative methods may contribute to the development of a theoretical model, that is not their chief goal (Creswell, 2007). Instead they concentrate on providing thick, rich descriptions that guide the creation of meaning. Grounded theory, on the other hand, looks less at content and context and uses the development of theories to promote explanation (Corbin & Strauss, 2008). The goal of grounded theory is to bring attention to some facet of social behavior and uncover the constructed nature of it (Charmaz, 2005). Ultimately, the hope for grounded theory methods is not only to produce a model for analysis, but to provide a blueprint for implementation of change (Hutchinson, 1990).

The goal of this study was to develop a theoretical model that revealed ways students situate themselves within classrooms. The primary concern was to acquire a deeper
understanding of how students perceived classroom spaces and how their perceptions helped or hindered their learning. Ultimately, the aim of this research was to move from the theoretical to the practical and, through the development of a grounded theory, make abstract notions of material culture and classrooms more concrete for students and instructors and develop meaningful ways to create better learning spaces in community college classrooms.

**Grounding a Theory**

Grounded theory is both process and product. In seeking to develop the product, a grounded theory, researchers use a set of tools that are collectively understood as grounded theory methodology (Denzin, 2007). This discussion of methodology is more concerned with the process than the end product, but to distinguish between method and outcome from this point forward GTM will refer to grounded theory methods and any use of the term grounded theory will represent an actual theory that emerges from GTM. In the forty years of its existence, GTM has developed in a number of directions, not all of them compatible, but each iteration reflects the theory’s beginnings in the Chicago School of Sociology (Charmaz, 2008).

GTM first emerged from the work of Barney Glaser and Anselm Strauss (1967/1999). As sociologists interested in patient and practitioner experiences with health care, Glaser and Strauss raised concerns that what they were seeing in the field did not connect with theoretical frameworks they had learned in the classroom (Hood, 2007). They believed a new approach was warranted; one interested less in grand theories and more connected to actual data (Bryant & Charmaz, 2007b). Their concern was that working from existing theories
created biases that got in the way of seeing data for what it really was (Kushner & Morrow, 2003). What they felt was needed was a method that allowed for the development of theories that came directly from the data; theories that could then be applied and tested against new data which, in turn, would lead to more refined theories (Charmaz, 2008). Glaser and Strauss developed a framework where collection and analysis proceeded together during research with each informing and reforming the other (Bryant & Charmaz, 2007a).

The continuous comparison of data and theory borrows from the concept of abduction which was originally developed by the pragmatist Charles Peirce in the 1930s (Reichertz, 2007). Abduction considers “all possible explanations for the observed data, and then forms hypotheses to confirm or disconfirm until the researcher arrives at the most plausible interpretation (Charmaz, 2006, p. 187). In other words, unlike deduction which works from the top-down or induction which works from the bottom-up, abduction remains in the middle moving back and forth from data and its interpretation. The advantage, or some may argue disadvantage, abduction offers is that it allows for the intuition of the researcher to enter the process (Bryant & Charmaz, 2007a). Reichertz (2007) asserts that abduction is less a form of reasoning or research than it is an attitude where one maintains “a state of preparedness for being taken unprepared” (p. 221). Abduction enables the researcher to form preliminary theories as data is collected and then to test those early explanations against new data in a continuous process which culminates in the production of an original understanding (Corbin & Strauss, 2008).
GTM provides space for the researcher’s own voice, in fact it not only recognizes the presence of the researcher it encourages it (Reichertz, 2007; Corbin & Strauss, 2008). While sifting and organizing data, researchers are encouraged to use their intuition to seek patterns in the data and then to seek meaning in the patterns (Charmaz, 2006). These are not idle ideas, however, but preliminary hypotheses that are then checked against new data. Data collection and analysis proceed simultaneously with the researcher continuously moving from one to the other in a process of successive approximation, in which theories are proposed, tested, and revised through successive iterations (Corbin & Strauss, 2008; Bryant & Charmaz, 2007a).

**Which (who’s) grounded theory?**

In their initial formulation of GTM, Glaser and Strauss (1967/1999) argued for letting the data speak for itself with no influence from outside sources, only the data and the intuition of the researcher were involved. They rejected the use of pre-existing theories to shape the coding process and strongly opposed reviewing research literature prior to a study. In the process of coding, data were not forced into preconceived categories, instead codes and categories were allowed to emerge from the data free from influence (Holton, 2007). Glaser and Strauss recognized that pre-existing knowledge might predispose the researcher to certain views, but they believed that if researchers remained open GTM allowed them to discover explanations from their data (Charmaz, 2005). When Glaser and Strauss first published *The Discovery of Grounded Theory* in 1967, they set forth a new methodology, but
they failed to define the methods (Mruck & Mey, 2007). When they did, it led to a parting of the ways between the two researchers.

In his approach to GTM, Glaser (1992) remained committed to the primacy of the data. Glaser expected researchers to maintain conceptual and theoretical neutrality; testing a theory or assigning meaning was not the goal, rather the development of an explanatory theory rooted in the data was everything (Urquhart, 2007). Data may be collected in any number of ways, but the primary data tool for Glaser and his adherents was the field journal (Glaser, 1992). Transcripts and recordings were too full of “endless descriptive and superfluous detail” which actually got in the researcher’s way (Holton, 2007, p. 276). Instead field notes of interviews and observations were to form the basis of the data. In his framework, Glaser begins analysis with open coding; a line-by-line reading of the data which leads to the first codes (Glaser, 1992) Selective coding follows, where the codes are grouped into categories, and then theoretical coding, where categories are evaluated and organized to produce a grounded theory (Urquhart, 2007). By limiting the researcher’s exposure existing literature and foregoing the need to provide the rich, thick description common to other qualitative methods, Glaser’s formulation of GTM allowed for theories to emerge from the data free from preconceptions (Holton, 2007). That is, grounded theories were not forced from the data, but allowed to emerge.

Strauss, on the other hand, deviated from a strict no theory, data-only approach and reasoned that prior research could aid GTM (Corbin & Strauss, 2008; Charmaz, 2008). Although he urged caution in the use of research literature, especially for GTM novices,
Strauss recognized value, albeit limited, in examining similar studies and applying the knowledge gained from them (Mruck & Mey, 2007). To incorporate ideas gleaned from literature searches, Strauss added an extra coding step to Glaser’s model (Scott & Howell, 2008). Axial coding occurs between open and selective coding and allowed for the introduction of conditional matrices, that is, codes are placed into categories that represent theories and models derived from other research (Scott & Howell, 2008; Holton, 2007). In other words, along with the intuition of the researcher, Strauss made room for the intuition of other researchers in different studies to aid in the interpretation and development of a grounded theory.

Glaser and Strauss may have disagreed over the use of research literature in GTM, but both adhered to a fairly positivistic epistemology (Kushner & Morrow, 2003). The founders of GTM viewed the discovery of any grounded theory as just that, a discovery of external and identifiable knowledge that represented an objective reality (Corbin & Strauss, 2008; Mruck & Mey, 2007). Since then a number of researchers have rejected positivist claims for GTM and now seek a new approach that reflects more relativist understandings (Charmaz, 2008; Clarke & Friese, 2007 ). Charmaz (2006) rejects the idea that data and theories are discovered insisting instead that they are constructed and that GTM “offers an interpretive portrayal of the studied world, not an exact picture of it (p. 10, italics original). Charmaz adopts Strauss’s coding scheme, except she replaces selective coding with what she calls focused coding (Charmaz, 2008). Focused coding aims to describe the constructed world from the point of view of those who build and live within it (Charmaz, 2006). In
forced coding Charmaz brings the rich, thick description common to other qualitative methods into GTM (Urquhart, 2007).

Glaser, and Strauss to a lesser extent, emphasized theory building over meaning making; Charmaz argues that both can operate in GTM (Clark & Friese, 2007). Glaser rejects researcher reflexivity as “paralyzing and self-destructive,” but Charmaz and other constructivists build it into their research, analyzing the ways power flows between observers and those who are observed (Mruck & Mey, 2007, p. 518). Data include not only the people and the phenomena under study, but also interplay and negotiations for power that take place as researchers gather information and construct meaning with participants (Charmaz, 2006). Context and content often left in the background by traditional GTM is brought to the fore, bringing GTM in line with other qualitative methodologies as well as incorporating theoretical understandings found in a host of critical ideologies including but not limited to Critical Theory, Feminist thought, Critical Race Theory, and Queer studies (Kushner & Morrow, 2003).

Citing the need to take GTM “around the postmodern turn,” Clarke continues explorations of meaning and power in GTM (Clarke & Friese, 2007, p.364). Clarke’s (2003) situational analysis maps out the many discourses present in any research context, including the research itself examining the power and politics present in any environment. Instead of a departure from earlier models of GTM, Clarke insists situational analysis actually is a reformulation of the conditional matrix Strauss developed (Clarke, 2003). Clarke literally maps out relationships between codes and categories seeking to expose elements that may
have remained hidden, intentionally or not, in other coding schemes, particularly the “political nature of the practices of research and interpretation” (Clarke & Friese, 2007, p. 368).

Despite the many differences in epistemology, application, and interpretation among practitioners, methods and practices in GTM remain fairly standard (Patton, 2002). Glaser and Strauss offered a broad scheme, constant comparison, where data collection and analysis occurred simultaneously with each activity shaping the other (Charmaz, 2006). Constant comparison remains central to GTM and regardless of their epistemological stance, users of GTM all follow the basic model first developed by Glaser and Strauss (Charmaz, 2005). The strength of GTM is its openness to intuition and serendipity and the range of interpretive models that has emerged reflects this openness and serves to make GTM more applicable and useful to researchers (Kushner & Morrow, 2003).

The flexibility of GTM, however, can also be seen as a weakness. A methodology that can serve so many purposes may be considered as having no structure and so no purpose (Creswell, 2007). Concerns about researcher objectivity, particular regarding theoretical neutrality, remain an issue for critics (Clarke, 2003). The largest complaint against GTM has to do with the theories it produces and their applicability. Because GTM seeks to remain independent of larger theoretical concerns, the theories it produces can be seen as outside larger discussions of how the world works. Hypotheses are neither proposed nor tested, instead, grounded theories may be viewed as particular responses to unique circumstances which makes them difficult to refute or reproduce (Goldthorpe, 1997). Such criticisms tend
to reflect the more nomothetic impulses of those with hard science backgrounds, but the critiques should serve as guides for GTM researchers to maintain a larger perspective in their analyses.

Despite, and maybe even because of, its limitations, GTM’s flexibility and its ability to uncover the worldviews of participants provide a valuable set of tools for this research. GTM is a process not a product and the debates over methodology mirror the process of GTM itself. As long as researchers remain close to the data and open to new possibilities, both as researchers and as methodologists, new discoveries will continue and interpretations may guide the development of the methodology and its applications.

**Sample Selection**

Qualitative studies seek participants through purposeful sampling (Miles & Huberman, 1994). Unlike quantitative research which employs random sampling over large populations, qualitative studies focus on a narrow band of individuals to highlight a particular experience or phenomenon which would get lost in random sampling. Each participant in a qualitative study represents a significant investment of time and effort amounting to hours of interviewing, transcribing, and coding so it is imperative that researchers screen individuals prior to any research activity to ensure that time is not wasted for either the researcher or the participant. For this reason, qualitative sampling is theory-driven, that is, it purposely seeks participants who fit a particular profile under study (Creswell, 2007). The participant profile is developed from a careful evaluation of the theoretical considerations of the study and through examination of similar studies done previously.
For this study, convenience sampling was employed to recruit participants. As the name suggests, convenience sampling allows researchers to open interviews to whoever is available and “take who or what he or she can get in terms of data” (Corbin & Strauss, 2008, p. 153). While expedient in terms of finding individuals to take part in a study, convenience sampling requires that the researcher accepts participants as they are instead of guiding selection according to theoretical development (Creswell, 2003; Morse, 2007). Convenience sampling limits the theoretical range of research, but for initial studies, such as this one, where data gathering is more exploratory than directed, the limitations are not critical (Marshall and Rossman, 2006). Ideally, as data analysis began, participant selection would shift towards theoretical sampling where individuals who could speak to particular properties of the research would be chosen. As perspectives of material culture and classrooms, however, are not readily apparent, theoretical sampling techniques did not enter into recruitment considerations.

Criterion sampling is another aspect involved in participant recruitment. The primary specification for participants was that they were current students at Central Piedmont Community College. There was no concern for any particular courses or programs, though people who frequent the Student Life offices where recruitment notices were posted tend to be curriculum students as opposed to individuals attending for continuing or corporate education courses. All of the students in this study were enrolled in curriculum courses. Although there were not any specific criteria regarding race, ethnicity, age, gender, nationality, or socioeconomic variables, diversity among the participants was an initial
concern and screening was planned to ensure a broad mix of individuals. Such concerns, however, proved unwarranted as the students who volunteered represented a cross section of the college’s population and so screening to create a diverse balance was not necessary. Convenience sampling in this case was truly convenient.

Given the limits on the researcher’s time and travel, participants were recruited at his place of employment, Central Piedmont Community College in Charlotte, North Carolina. CPCC has multiple campuses and to limit some bias, recruiting took place only on the campuses where the researcher did not teach. Recruitment notices were posted at Student Life offices on two of the larger campuses. A recruitment notice also appeared in the student newsletter that CPCC emails to every enrolled student each week and which all but a few students ignore. In addition, the first participants interviewed were asked to recommend colleagues who fit the parameters of my research. Three of the participants came from friend recommendations, the rest responded to the notices posted at Student Life offices. No participants came from the newsletter notice.

Although the researcher’s affiliation with the school may have introduced some bias into the study and brought issues of power into the interviews these factors were not seen as prohibitive. Mitigating such concerns was the fact that CPCC is a large school with over 30,000 curriculum students and another 30,000 students in corporate and continuing education all of whom attend classes and workshops at eight campuses and online (Central Piedmont Community College, 2015). Taking advantage of CPCC’s size and operating on different campuses allowed for a level of anonymity between interviewer and participants.
None of the participants had a prior relationship with the researcher, although a few were familiar with the name. Students may have had some sense of the researcher’s authority as instructor, but this bias was not seen as problematic in that it was not avoidable. Even if conducted at another school, the positionality of the interviewer and participants would affect the relationship. In fact, the goal of the interviews was not to eliminate the researcher’s role as an instructor, but to acknowledge and examine it within the context of the study (Corbin & Strauss, 2008; Charmaz, 2006).

Data Collection

Methods of collecting qualitative data can be sorted into four broad categories; participant observation, direct observation, interviews, and document analysis (Marshall & Rossman, 2006). While each may be used to some extent in all qualitative studies researchers, especially those with limited time and funding, focus on one primary method for collecting data in their studies. To determine which method to employ, researchers must be clear what data they are seeking and the best means for collecting it. Because research into learning spaces is in a preliminary stage of exploration, interviews were determined to be a necessary first step into the field in order to identify the themes and approaches that later research, which could include direct and participant observations, could further illuminate.

Interviews

In-depth interviews have long been a staple of qualitative research. The most effective means to find out what people are thinking and experiencing is to ask them. Interviews, however, must be carefully structured so that what is revealed by participants are
their own thoughts and not those of the interviewer. Open-ended questions are essential for allowing participants the ability to express themselves as they see fit. Interviews, however, are not counseling sessions and qualitative research is more than an exercise in stream-of-consciousness. Interviewers must carefully construct questions that keep the focus of the discussion on research issues. The challenge for the researcher is to craft open-ended questions that give participants the opportunity to openly discuss issues without veering too far off course. Another consideration that takes precedence over gathering data is the comfort of the participants, especially when issues that are deeply personal are raised.

For this study, interviews were conducted in two parts. The first meeting was a brief introduction that lasted no more than ten minutes where the interviewer and each recruit met and discussed the purpose of the research and what was expected of participants. Once all questions and concerns were addressed, a time and meeting place for the second and longer interview were set. Only one recruit declined to participate. Fourteen participants were interviewed in-depth for approximately an hour where they discussed their experiences and thoughts on learning spaces and classrooms (questions are listed in an appendix). Each interview began with participants’ descriptions of their classrooms. They were then asked to describe the places where they learned. The focus of each interview was when participants discussed how their classrooms and learning spaces differed. My hope was (and remains) that by verbalizing their spatial strategies, participants recognized how they place themselves within classrooms and how they might extend their agency in classrooms and perhaps expand their learning.
Interviews were recorded using a digital voice recorder (DVR). The audio files were converted to .wav files and uploaded to Audacity, an open source audio editing program that allowed for controlled playback. Playing recordings at ¾ speed enabled the researcher to retain comprehension while allowing for easier transcription. While time consuming, the process of transcribing provided the researcher with a level of familiarity with participant voices that proved useful throughout the process of analysis. Once transcribed, recordings were deleted from the DVR and housed solely on a separate hard drive under a password for security. Participants were offered the opportunity, by email, to review transcriptions of their interviews and amend or redact any or all statements. If participants had no questions or concerns they were informed they did not need to respond and thereby provide tacit approval of the transcripts. Five of the fourteen participants responded to the emails and approved the use of their interviews as transcribed.

Photo Voice

Along with in-person interviews, this research attempted to provide document analysis in the form of Photo Voice. Photo Voice methodology refers to the use of photographs during interviews to both focus and expand discussions (Singhal, Hater, Chitnis, & Sharma, 2007). The use of photographs has been found to help participants focus on their actual surroundings and offer details they might normally have neglected. Photographs also allow interviewers to see environments from the perspective of participants and ask questions based on a broader understanding of the physical environment. Researchers who employ Photo Voice believe that using photographs gives participants a voice in the research they
normally would not have, giving them greater control over the direction of the research and in the construction of the reality depicted (Grosvenor, Lawn, Nóvoa, Rousmaniere, & Smaller, 2004).

In this study, participants were asked during the preliminary meeting to take photographs of their classrooms and their learning spaces and, if possible, to email them to the researcher prior to the interview. Although the use of a digital camera was offered, all participants indicated they would use their own smart phones to take photos. Unfortunately, only seven of the participants took photos and none of the photographs were emailed prior to the interview so the only way to examine the photos was by sharing the participant’s phone which proved somewhat cumbersome and not as effective as a larger format might have been. In the interviews that were able to use photos participants were able to describe their classrooms and learning spaces more effectively, a fact that only highlighted the disappointment at the missed opportunity.

Data Analysis

Qualitative research data collection entails going into the field and pulling information from a wide variety of sources. Unlike quantitative studies that collect numerical data which allows for linear analysis through statistical methods, qualitative data represents the collected, and often lengthy, observations and experiences of individuals across a wide spectrum of perspectives. Analysis of such wide ranging data requires a variety of techniques that can sift, sort, select, and finally interpret the acquired knowledge. Qualitative analysis is further complicated and perhaps enlivened by the presence of the researcher who is the
primary instrument of data collection and interpretation. In any qualitative analysis the
uniqueness of the data and the researcher creates unlimited possibilities and challenges in
interpretation. As Creswell (2007) notes, qualitative "data analysis is not off-the-shelf; rather
it is custom built" with the researcher learning the process of analysis while conducting it (p. 150). In the end, more than one narrative can emerge from the same set of data and it is
important for researchers to recognize the centrality of their role as collector and interpreter
of the data (Corbin & Strauss, 2008).

The primary form of data in qualitative research is words and the challenge for the
researcher is to use those words to create meaning. In most qualitative studies the process
that develops meaning from the many words and images drawn from working in the field is
coding (Miles & Huberman, 1994). In GTM coding proceeds along an incremental path
where words become codes, codes become categories, and finally categories become theories
that explain a particular relationship between the participants and their world. Many authors
refer to GTM analysis as a spiral where data is collected, sorted, and interpreted in successive
loops with every previous iteration informing the next (Creswell, 2007; Marshall &
Rossman, 2006). Ideally, collection and analysis occur more or less simultaneously so that as
interviews progress they can reflect the emerging interpretation of the researcher.

Following the GTM model, the ideal is to enter the first interview with as few
preconceived ideas as possible (Glaser & Strauss, 1967/1999). The goal is to ask open-ended
questions that enable participants to reveal their own perspectives on the topics under study.
The first phase of data analysis, known as open coding in GTM, begins immediately
following the first interview. Transcriptions of interviews are reviewed line by line as the researcher seeks patterns in the participant’s responses. Ideas and concepts that emerge reading the transcripts are identified and initial codes are attached to them which represent the researcher’s first impressions of what is happening (Corbin & Strauss, 2008; Hutchinson, 1990). Another form of coding involves setting different settings in opposition to each other to highlight contrasts through codes. Versus Coding enables researchers to emphasize the dual nature of a dichotomous problem (Saldaña, 2016). Although Versus Coding is generally used to establish moieties, that is, groups of people with differing views, in this study it was used to establish differing perceptions participants had for the two locations where they were students; their classrooms and their study locations. The advantage of Versus Coding is that it “makes evident the power issues at hand as humans often perceive them – as binaries or dichotomies” (Saldaña, 140, 2016). New codes are used to refine interview questions and are tested immediately in the following round of data collection to determine if what emerged in the first round of interviews is also present in subsequent sessions (Corbin & Strauss, 2008). As the process of interviewing, coding, and revising proceeds, the researcher compiles an ever larger database of codes which allows analysis to progress to the next stage.

In axial coding, the second phase of GTM data analysis, researchers search through the code lists created by open coding seeking larger patterns and collecting a number of related codes to form themes and categories (Glaser & Strauss, 1967/1999). As in open coding, the themes developed in the second stage are compared against participant responses seeking the best fit between the participants' experiences and the researchers' understanding
(Charmaz, 2008) The continuous moving between the data and the analysis is referred to as constant comparison and reflects the emphasis on abduction on which GTM is built (Reichertz, 2007). While quantitative methods often rely on statistical analysis to determine if the collected data matches an already developed theory, qualitative methods seek to create a theory and so must remain flexible as ideas emerge and evolve (Corbin & Strauss, 2008).

Ideally, the first and second phases of GTM continue until saturation occurs; the point at which codes, themes, and categories consistently recur and established patterns present themselves (Scott & Howell, 2008). Given the almost infinite variety of participants and responses, true saturation is not likely, but after a number of interviews researchers usually encounter enough similar responses to identify recurring responses and recognize that no new patterns are emerging. Once saturation is established, analysis enters the third and final phase where codes are sorted and collected into sets of categories which are evaluated and further consolidated until one or two core categories emerge (Corbin & Strauss, 2008). Core categories are shaped to form a grounded theory that explains the phenomenon under study.

The process of coding, forming themes, categorizing, and theory-building in GTM takes form through the writing of memos (Stern, 2007). Memos provide “the methodological link, the distillation process, through which the researcher transforms data into theory” (Lempert, 2007). It is in memos where researchers collect their thoughts and employ their intuition in analyzing data and developing codes. Memo writing is similar to journaling in that it represents a recorded, internal conversation between the researcher and the research (Lempert, 2007). In memos the researcher first identifies codes, then categories, and finally
the theory that define the study. Like coding, memos evolve from preliminary to more complete forms as the research progresses. Memo writing involves a continuous process of moving back and forth from the data as well as from the codes to the categories that emerge (Holton, 2007). As memo writing progresses, a cohesive narrative emerges that provides an explanatory model for the data. The grounded theory that emerges from the research can be considered the final iteration of memo writing (Corbin & Strauss, 2008).

Coding for this study began almost immediately upon completion of each transcript. Transcripts were read and reread and notes began to fill the margins. Each pass through the transcripts brought a different colored pencil. Playback of recorded interviews accompanied some of the reading so an ear could be kept open to inflections and tones not visible on the page. Notes in the margins gave rise to initial codes. Initial codes and keywords were then collected and organized into grids which formed themes that unified multiple codes. Each theme grid was shuffled and reshuffled as ideas for categories were read against the actual transcripts for fit. While coding software would most likely have been of great use during this process, the practice of going through the interviews became so organic and regular, the thought of employing coding software never occurred.

Throughout the coding process, particularly in the formation of theoretical statements, Critical and Post Modern theories wove their way into interpretations of the relationships participants had with their classrooms and learning spaces and the power within them. Notions of control and agency arose in the final analysis and led the research back through the initial coding seeking new links. Memo writing, became an iterative process, taking the
form of a narrative in which the voices of all participants were stitched together. The process
of writing the narrative began by following the guidelines provided by categories, but
continually evolved as theoretical statements emerged in the process of writing.

Coding was conducted with an eye towards saturation, the point at which responses
began to fall into recognizable patterns and new data, while still emerging, no longer
presented the possibility of new codes or categories. (Corbin & Strauss, 2008). In this case,
as initial codes formed and preliminary categories began to emerge, responses from new
interviews were analyzed in relation to them. After a dozen interviews, it became apparent
that in their descriptions of classrooms and learning spaces, students offered similar
perspectives that fit within the categories established from coding earlier interviews. Two
more participants whose meetings had already been scheduled were interviewed but the new
data fit well within the established codes and so it was determined that fourteen hours’ worth
of discussions on learning spaces would suffice for analysis.

Validity and Reliability

Meaning is a product of validity and reliability. What we know emerges from our
ability to trust our sources of knowledge. In quantitative work, validity is a product of how
closely a sample of participants represents the population at large. The larger the sample, the
more it is considered a valid representation of the general population. Reliability in
quantitative work refers to replicability. That is, can other researchers, using the same
methods, repeat the study and arrive at similar results? Ideally, quantitative researchers
perform the same studies over an ever-increasing pool of participants and if their results
remain consistent they may claim that their research is both valid and reliable. With small sample sizes and highly individualistic and interpretive findings, qualitative researchers must employ other means for determining the meaningfulness of their work.

Qualitative studies are not designed to test a particular hypothesis in a simulated environment that represents the world at large, rather researchers go out into the world as it is to develop an understanding of how it works. The goal is not to manipulate variables but interpret relationships and interactions that already exist. Determining validity and reliability using quantitative methods is neither possible, nor applicable (Pandit, 1996). In fact, many scholars argue whether the terms validity and reliability even apply to quantitative work (Golafshani, 2003; Creswell, 2007). Despite their arguments over terms, qualitative scholars are deeply concerned about the construction of meaning and have established methods to ensure that their research is reasonably and accurately portrays the life and experiences of their participants.

In qualitative work the researcher is the primary instrument for both the collection and analysis of data. The first concern is that the investigator is prepared to go into the field to interview and observe participants in their environment. From a practical standpoint this means interview questions, recording equipment, and any other data collection devices are ready to be used and that back-ups are also available if necessary. Interview guidelines help to ensure that the researcher follows a standard path in the interview process and promotes consistency in the data collected (Miles & Huberman, 1994). If possible, researchers should employ multiple methods of observation and recording which can then be used to corroborate
and reinforce one another, a technique referred to as triangulation (Creswell, 2007; Corbin & Strauss, 2008). Once completed, interviews are transcribed and then made available to the participants so they may correct any mistakes and, if necessary, remove sensitive material. Altogether, these steps allow the investigator to establish internal validity, that is the material recorded and presented in the research accurately depicts what happened in the field (Miles & Huberman, 1994).

From a philosophical perspective establishing validity means that the researcher is prepared for all contingencies and has developed strategies for conducting and concluding interviews in a number of different scenarios. Along with interview guidelines, researchers must acknowledge any biases that may affect how they both collect and analyze data. Biases cannot be removed, but if they can be identified their influence can be understood in a way that allows for more meaningful interpretations (Marshall & Rossman, 2006). Recognizing one's own biases also enables the researcher to recognize how participants construct their own realities opening the ability to gain a deeper understanding through better questions and more insightful analysis (Golafshani, 2003). Once again, the goal is for the world portrayed in the research to closely represent the world as it was experienced by both the researcher and the participants or what some refer to as verisimilitude (Miles & Huberman, 1994).

External validity relates to how well the results of a study can be applied in a larger context (Marshall & Rossman, 2006). Given the individualistic nature of qualitative research, replicability is not feasible nor is it desirable considering the importance of the researcher as the chief instrument of data collection and analysis. The unique perspectives of the
researcher, the participants, and the relationship between the two is a defining feature of qualitative research and being able to replicate a study would call into question the very rationale for such work. Although qualitative researchers rule out replicability, they do stress the need for studies to have broader applications (Creswell, 2007; Miles & Huberman, 1994). To this end, researchers have emphasized the need for thoroughness and transparency in qualitative work (Marshall & Rossman, 2006). The goal is not to promote replication, but to allow readers complete access into the researcher's thoughts and decision-making processes regarding the collection and analysis of data. If others can see how a study came together and how its findings were produced, they should also be able to see how that research applies to other areas (Miles & Huberman, 1994).

To establish and maintain reliability in this study, interviews were recorded to ensure the integrity of participants’ voices. Transcripts were checked against the recordings to make sure the written version corresponded accurately with the recorded voices. Throughout the process of coding and analysis, recordings and transcripts were revisited following the process of constant comparison, checking categories and theoretical statements against the data to make sure interpretations remained close to the perceptions of participants. Findings were also corroborated with those of similar studies in research literature. Although the approach for this research was somewhat unique, work examining the relationships between people and places and the perceptions they form provided a basis of comparison for interpretations presented here.
**Researcher Bias and Assumptions**

One of the fundamental assumptions of GTM is that in order for research to be grounded in the data, it should be free from preconceived ideas (Glaser & Strauss, 1967/1999). However, the act of tying data and theories together in a supposedly neutral environment is itself an ideological process (Gibson, 2007). Data is never neutral. The decisions made in selecting what data will be used or not used represent choices, conscious and otherwise, by researchers and participants. Interviews are relationships and individuals carry with them every other relationship they have ever had into the room with them. The dialogues that emerge are not neutral, but are products of each person’s past as well as their present situation. To be honest to the data, is to be open to the environment of the interview.

Processing the data after interviews is also problematic. Despite the best efforts of any researcher, grounded theories “are always constructed, never bedrock solid, always nuanced, and potentially dangerous. The ground itself is a function of the researchers’ shifting relationship to the world” (Denzin, 2007, p. 458). Theories developed through GTM can be considered political performances that incorporate knowledge and power, both tacit and explicit, into the creation of meaning (Gibson, 2007). The challenge for any researcher using GTM is to recognize not only the biased nature of any data but also to admit that the entire nature of the process, beginning with the researcher, represents a series of choices and perspectives, none of which are neutral (Mruck & Mey, 2007).

Although introducing theory to the analysis of data runs counter to the purpose of GTM, there is a need to recognize social and political influences on data before they even
become data (Gibson, 2007). Critical and Post Modern theories examine the presence of power in all facets of society; recognizing it and making it known to others in order to promote the emancipation of humanity from all forms of oppression (Brookfield, 2005). Adorno (1991) warned that concepts and theories have a tendency to reify, that is, to become objects and assume power as actual things in a culture. GTM, through constant comparison remains close to data and avoids forming large metatheoretical statements (Glaser & Strauss, 1967/1999). By offering middle range theories that stay close to data, GTM produces tentative understandings that are understood as constructions, not objects (Charmaz, 2006). Grounded theories allow data to speak for itself while also promoting an awareness of how that data came to speak at all (Kushner & Morrow, 2003).

Not only must this research reliably report the voices of participants, the researcher’s own voice must be acknowledged. I apologize for breaking the fourth wall but in analyzing and writing up the data, I had to make sure that my voice, hidden as it was using third person form, did not assume an aspect of objectivity that did not actually exist. To keep grounded in the data, it was important for me to regularly ask who was I writing for? As a researcher and author my voice stands here as the final say in the matter, but in doing so I spoke for others whose voices form my data.

Critical reflection is vital for researchers to maintain balance between what they want to say and what the data reveals (Mruck & Mey, 2007). In this research my hope was to reveal to participants, readers, and myself more clearly the power that is built into classrooms and discover ways that allow us to empower ourselves within those same spaces. It was
important, however, to ensure my desires and goals did not get in the way of what it is my participants had to say. My role as the interpreter of participant voices put me in a position of power and as I organized and arranged their words and combined them with my own, I maintained an awareness of the importance of my task and made sure to conduct the work with deliberation and care.

Summary

This study of students and their classrooms and learning spaces employed grounded theory methodology (GTM) in the collection and analysis of data. The evolution of GTM was discussed and its application to this research was described with a note on the methodology’s strengths and weaknesses. Discussion of the study itself followed with accounts of participant selection, data collection, and analysis. Finally, concerns of the reliability and validity of this research were considered and, hopefully, addressed.
CHAPTER 4: FINDINGS

The purpose of this chapter is to present findings that discuss how community college students make spaces for themselves and their learning in classrooms. The questions guiding this study were concerned with how students related to their classroom environments. Particularly, how do college students construct their learning spaces? How do their actual classrooms fit into those constructions and do they consider their classrooms as places they can learn? Finally, what strategies and methods would allow students to make classrooms into better learning spaces? Ideally, this research will help develop a better understanding of classroom spaces and how the people who use them, primarily instructors and students, can create a more welcoming and effective environment for learning.

The goal of this chapter is to construct a grounded theory in the manner of constructing a classroom. Instead of length, width, and height the dimensions for the grounded theory are the perspectives of the students and how they saw their classrooms, themselves in those rooms, and how they constructed their learning spaces. The chapter opens with an overview of the participants of the study, which includes brief biographical sketches and general information about their academic careers at Central Piedmont Community College. The bulk of this chapter is devoted to a discussion of participant responses to interview questions. Each section of the findings addresses student responses to a specific set of questions about their classrooms and learning spaces. Discussion of the collected responses focuses on developing a general student perspective of the questions which will lead to a theoretical statement provided at the end of each section. Finally, the
concluding statements for each section are gathered and synthesized into a conceptual framework that provides a theory grounded in the data presented.

The Participants

Participants for this study were all students at Central Piedmont Community College. Fourteen individuals, all of them active in curriculum programs, took part in interviews over the course of several weeks. Students were met at the campus of their choosing, usually near the Student Life office where they first encountered the notice for participants. After an initial greeting, an empty classroom was located and participants were invited to make themselves comfortable anywhere in the room. Invariably, participants selected a desk in the center of the room. Given the schedules of most students, interviews were conducted in the afternoon when classes and students are scarce on most campuses and both participants and interview rooms were free.

Nine men and five women participated, ranging from an 18-year-old taking college classes concurrently as a high school senior to a 72-year-old retiree taking classes for his own enjoyment. All of the participants have been at CPCC for at least 2 semesters. Seven of the students could be considered traditional students, that is, 18 to 22-year-olds who enrolled in college not long after graduating from high school. All but three of the participants worked in addition to attending school, seven of them full time.

Owing to the fact that flyers and notices for this research were posted in Student Life offices at five different campuses, all the individuals who responded were to some extent involved in campus life activities. Six students participated regularly in student groups,
including Student Government Association, Model United Nations, and the CPCC Service Club among others. As folks in Student Life are quick to point out, students who take part in organized activities tend to have higher grades, a fact borne out by relatively the high GPA’s of the participants in this study. All participants have cumulative GPAs over 3.0 and most are above 3.5.

In the interest of offering more perspective on the individuals who took part in this study, the following section provides short biographies ordered alphabetically according to each participant’s chosen interview name. Some of the information came directly from interviews, the rest represented information from informal conversations during the pre-interview meeting and chats that occurred before or after the recorded interviews. Some interviewees were more forthcoming than others, including one who spent upwards of an hour chatting amiably after the interview concluded, which accounts for the differences in personal information about each participant. Following the individual profiles, a general profile of the participants will offer a broad picture of the people whose responses shaped this research.
Table 4.1: Research Participant Data

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Gender</th>
<th>Age</th>
<th>Marital/Partner Status</th>
<th>Living Situation</th>
<th>Employment</th>
<th>Semesters CPCC</th>
<th>Semesters other Colleges</th>
<th>Credit Hours Taken Currently</th>
<th>GPA</th>
<th>Program of Study</th>
<th>Parents Education</th>
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<tbody>
<tr>
<td>Aysha</td>
<td>F</td>
<td>20</td>
<td>s</td>
<td>Self</td>
<td>None</td>
<td>6</td>
<td>0</td>
<td>12</td>
<td>3.75</td>
<td>AA - Transfer</td>
<td>HS+</td>
</tr>
<tr>
<td>Bo</td>
<td>M</td>
<td>72</td>
<td>d/s</td>
<td>Self</td>
<td>Retired/PT</td>
<td>2</td>
<td>(BA/MA) 3</td>
<td>4.0</td>
<td>Business</td>
<td>HS HS</td>
<td>Undeclared – Transfer</td>
</tr>
<tr>
<td>Calvin</td>
<td>M</td>
<td>26</td>
<td>s</td>
<td>Self</td>
<td>FT Retail</td>
<td>3</td>
<td>4</td>
<td>14</td>
<td>4.0</td>
<td>Undeclared – Transfer</td>
<td>HS+ As</td>
</tr>
<tr>
<td>Chris</td>
<td>M</td>
<td>21</td>
<td>s</td>
<td>w/Parents</td>
<td>FT Retail</td>
<td>4</td>
<td>1</td>
<td>14</td>
<td>3.5</td>
<td>Undeclared – Transfer</td>
<td>Grad Grad</td>
</tr>
<tr>
<td>Cody</td>
<td>M</td>
<td>19</td>
<td>s</td>
<td>w/Parents</td>
<td>FT Restaurant</td>
<td>2</td>
<td>0</td>
<td>16</td>
<td>3.65</td>
<td>Business - Transfer</td>
<td>Grad Grad</td>
</tr>
<tr>
<td>Jack</td>
<td>M</td>
<td>20</td>
<td>s</td>
<td>w/Parents</td>
<td>PT Retail</td>
<td>4</td>
<td>0</td>
<td>15</td>
<td>3.4</td>
<td>Undeclared – Transfer</td>
<td>Ba Ba</td>
</tr>
<tr>
<td>Justin</td>
<td>M</td>
<td>18</td>
<td>s</td>
<td>w/Parents</td>
<td>PT Grocery</td>
<td>2</td>
<td>1</td>
<td>15</td>
<td>3.8</td>
<td>Engineering - Transfer</td>
<td>Ba Ba</td>
</tr>
<tr>
<td>Laura</td>
<td>F</td>
<td>20</td>
<td>s</td>
<td>w/Parents</td>
<td>2 PT Jobs</td>
<td>4</td>
<td>0</td>
<td>16</td>
<td>3.4</td>
<td>Undeclared – Transfer</td>
<td>Ba Ba</td>
</tr>
<tr>
<td>Regina</td>
<td>F</td>
<td>46</td>
<td>d/s</td>
<td>Self/Children</td>
<td>FT Bank</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>3.7</td>
<td>Biology - Transfer</td>
<td>HS &gt;HS</td>
</tr>
<tr>
<td>Tim</td>
<td>M</td>
<td>33</td>
<td>m</td>
<td>Self &amp; Wife</td>
<td>FT Technology</td>
<td>5</td>
<td>3</td>
<td>6</td>
<td>3.8</td>
<td>History – Transfer</td>
<td>Ba Ba</td>
</tr>
<tr>
<td>Tom</td>
<td>M</td>
<td>25</td>
<td>s</td>
<td>w/Mother</td>
<td>FT</td>
<td>4</td>
<td>0</td>
<td>13</td>
<td>3.8</td>
<td>Biology - Transfer</td>
<td>AA ?</td>
</tr>
<tr>
<td>Toni</td>
<td>F</td>
<td>72</td>
<td>w/s</td>
<td>Self</td>
<td>FT/Self Employed</td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>3.5</td>
<td>Undeclared – Transfer</td>
<td>HS &gt;HS</td>
</tr>
<tr>
<td>Victoria</td>
<td>F</td>
<td>20</td>
<td>s</td>
<td>w/Parents</td>
<td>PT Coffee Shop</td>
<td>4</td>
<td>0</td>
<td>12</td>
<td>3.2</td>
<td>Undeclared – Transfer</td>
<td>HS AS</td>
</tr>
<tr>
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<td>M</td>
<td>22</td>
<td>s</td>
<td>Self</td>
<td>None</td>
<td>4</td>
<td>1</td>
<td>17</td>
<td>3.7</td>
<td>AA –Transfer</td>
<td>&gt;HS &gt;HS</td>
</tr>
</tbody>
</table>
Aysha

Aysha is a 20-year-old single female, who describes herself as the “baby” of four siblings. A first-generation citizen born of immigrant parents, Aysha identifies herself as Asian Indian and holds to the traditional values of her parents, including accepting her family’s choice of spouse to whom she will be married after completing her degree. Initially reluctant to attend community college, she believes she was punished for an older sister’s wild years at a distant university and so was required by her parents to remain at home for at least her first two years of college and so opted for Central Piedmont because it was close to her house. Aysha now believes strongly that attending a community college “is probably the best thing to do before actually going off to a university.” Active in Student Government, Model UN, and an enthusiastic participant in countless events and projects, Aysha has been recognized by the school for her engagement in the school and community. She plans to continue her studies at UNC Charlotte seeking a degree in International Business.

Bo

Bo is a 72-year-old white male. Divorced with grown children and a growing number of grandchildren, Bo is the only one in the study who already had a college degree. He worked as an engineer for Ford and IBM before getting an MBA and moving into marketing. In the late 1970s he moved to Charlotte and into a new career in commercial real estate where he continues to work intermittently. Once established in his new city and career, Bo began teaching real estate classes part time at Central Piedmont Community College and is familiar with the institution as both instructor and student. Enjoying his retirement, Bo no
longer teaches but now comes to CPCC every semester to take classes “just for the knowledge” and fellowship. In addition to classes, Bo regularly attends social events on campus such as films, concerts, and speakers. He also travels frequently, both in the US and abroad, and stays active with a local Harley Owners Group (HOG) chapter.

**Calvin**

Calvin, a single 26-year-old white male, is originally from Saint Louis where he was pursuing a career in music which included a degree in music education and music theory at the local community college. As the music career took off, he dropped his studies. Unfortunately the take-off was short-lived and after a few financial roadblocks, Calvin relocated to Charlotte to live with his father. While he plans to continue with his music studies, Calvin is now looking to transfer to a four year university and obtain a degree in International Studies. Having just paid off his debts, Calvin is reluctant to start again with student loans, so he plans to attend community college as long as possible before transferring. He works full time and is in his third semester at CPCC.

**Chris**

Chris, a 21-year-old white male, is originally from Canada who moved with his family to the Charlotte area during his freshman year in high school. He plans to get a Bachelor’s degree in aviation and join the Air Force. Chris attends CPCC because it is “so much cheaper,” but notes that he also appreciates that community college classes are “a little more personal” than experiences he has had visiting four year schools. Chris identifies
himself as a “really extroverted person” who despite working full time, enjoys spending time at CPCC outside his classes to socialize and occasionally study.

Cody

Cody, a 19-year-old white male, experienced peripatetic primary and secondary educations, attending 13 different schools before coming to community college. He started at CPCC as a concurrent student, taking college classes while still in high school, but is continuing his studies at CPCC to earn an Associate’s degree for financial reasons. He plans to transfer to a four year program in finance and business management. The son of academics, Cody is well-versed in the language and culture of education.

Jack

Jack is a 20-year-old white male who is returning to college after a brief time away. He still lives at home with his parents and works part time at a locally-owned coffee shop. He is not sure what career or field of study he wishes to pursue, but the break from studies did convince him of the need to finish college. Born in Birmingham, England, Jack has lived all but 5 years of his life in Charlotte, yet somehow manages to maintain his British accent.

Justin

Justin is a white 18-year-old concurrent student shuttling between campuses to meet his academic requirements. Home-schooled for most of his life, Justin began taking math and science classes at CPCC and at Rowan-Cabarrus Community College to meet state requirements and to fulfill his own plans for college. He plans on graduating high school with both a high school diploma and Associate’s degree and transferring to an engineering
program within driving distance of home. Justin is the oldest of several children in a family he describes as very close-knit.

Laura

Laura is a white 20-year-old female who admits she was a less than stellar student in high school mainly because, as she puts it, “I like being educated, but I do not enjoy the system of education.” Recently, however, she “decided to get everything together and stop slacking.” In her third semester at CPCC, she hopes to transfer soon to Appalachian State and study computer information systems. She is single and lives at home with her parents while working a couple of part time jobs to pay for expenses.

Regina

Regina is a 46-year-old African-American single mother of three and Navy veteran who has worked for a number of years at Wachovia, now Wells-Fargo. She lives at home with her youngest daughter, who is a junior in high school. With “the nest nearly empty,” Regina decided to return to school after a hiatus of 26 years. She plans to complete a degree in biology, apply to medical school, and pursue her lifelong dream of becoming a pediatrician. Acknowledging she was a distracted and bored student as a teenager, she is now focused and finds that now school “is just so much fun.”

Tim

Tim is a white male, 33 years old, and married. He is returning to college after an earlier attempt where he confesses he “didn’t like to attend class” and was asked not to return. Tim’s wife is currently in medical school and he is the primary wage earner in his
household, working full time and taking classes when he can. After his wife completes her training, Tim hopes to pursue his studies full time and become a high school history teacher.

**Tom**

Tom is a single, white 25-year-old who works full time but manages his schedule so that he can also attend school as a full time student. Raised by a single mother, Tim relates that he was far from an ideal student while a teenager and after a few years with declining attendance and grades he finally dropped out of high school. He enrolled at CPCC initially to attend the Adult High School program but he enjoyed the environment so much he registered for college courses as soon as he could. He earned certification as a paramedic and is now continuing his studies in biology to pursue a career in medicine.

**Toni**

Toni is a 72-year-old white female. Early in life, Toni was labeled in her words as “too stupid to learn” and so was passed through school with little attention devoted to teaching her basic skills. She graduated high school despite reading at only a fifth grade level. Later, as she advocated for her two children and the treatment of their learning disabilities, she became aware that she was dyslexic. After seeing her children off to college, Toni turned her attention to her own academic needs. She learned how to cope with her dyslexia and took classes wherever and whenever she could. After her husband died, she enrolled full time at CPCC. She hopes to transfer to a local university and enter their creative writing program, with the goal of writing about her own experiences. Toni also travels across
the country to literacy conventions and gatherings speaking about her challenges and inspiring others to see past their disabilities and seek help and training.

**Victoria**

Victoria is a 20-year-old single white female who considers herself “about as local as you can get.” She lives with her parents and works part time in a coffee shop while attending classes as a full time student. She hopes to pursue a degree in anthropology which she sees as a place where “knowing all this random information about other cultures” might have value. Financial factors figured into her decision to attend community college, but she is determined to transfer and graduate from a university and become the first in her family to earn a college degree.

**Zaman**

Zaman is a 22-year-old male from Afghanistan. He first came to the US as part of a medical exchange program, Solace for Children, that transports children from war torn regions to receive medical treatment in American hospitals and then provides for their recovery with local families before sending them home. After his time here, Zaman was determined to return for his schooling. He is interested in finance and economics and hopes to earn a degree and return to Afghanistan where he can help rebuild his country. He is very active in student life and every summer serves as a coordinator for Solace for Children escorting children from Afghanistan to the US and settling them with host families.
Collective portrait of participants

As a qualitative study, this research did not seek a representative sample and so some of the diversity one might seek in larger surveys was not present here. Of the 14 people who took part in the interviews, 11 of them identified ethnically and racially as whites of European descent. All the participants described themselves as middle class and though their definitions of that status may vary somewhat, they all expressed, directly and indirectly, standard middle class values regarding educational and career opportunities. All of them articulated the belief that education was a means to a better end, namely good jobs, and that through personal effort they could achieve their academic and career goals. Except for Bo, who already had a couple college degrees, all of the participants intended to continue their studies at four year universities to obtain at least a Bachelor’s degree before moving into chosen careers.

Despite the ethnic similarity among the respondents, the individuals who volunteered their time for this study demonstrated considerable diversity of age and experience. The average age of participants was 31 years, which fit with the average age of curriculum students at Central Piedmont Community College which is 29. The average, however, was skewed by the fact that two of the participants were over 70. More reflective of the overall age of respondents was the median of 22 years, which placed the sample within the generally understood traditional age for college students. Despite the younger median, six of the participants attended another college prior to entering CPCC. For the eight other students,
CPCC represented their first college experience, which certainly figured into their experiences and responses.

Regarding their educational experiences prior to CPCC, eight of the participants recounted difficulties, primarily in high school. Most credited their own lack of motivation for the problems they faced and noted that attending community college was in part due to poor preparation or low grades that followed them through high school. A number of participants also reported disruptions in their academic paths. Five interviewees dropped out of school at least once, while nine of them changed schools at some point during their studies, including Cody who, by his count, attended nine different schools in three different states before he graduated high school. Despite, or maybe because of, their difficulties as students, nearly all of the interviewees noted a higher level of “seriousness” in their current academic pursuits.

Nearly every participant, 11 of the 14, voiced concerns about college expenses and listed financial considerations among their motivations for attending community college. Six students received financial support from their families for tuition, the rest were paying their own way and recognized, like Victoria, that CPCC was “a lot cheaper option” than going directly to a four year school. To help pay their way, all but two of the participants worked at least part time. A few participants were financing their community college tuition through loans, but most were staying within pocket, preferring to hold down their debt until they reached the university level, which seemed to be the goal of all the participants except for Bo, who already had Bachelor’s and Master’s degrees.
In discussing their academic goals, everyone excluding Bo had specific programs and career goals in mind, which suggests the participants in this study were somewhat more directed in their studies than community college students in general, many of whom do not have plans beyond passing their current classes. A number of the participants had already determined where they wanted to complete their Bachelor’s degrees and a few even laid out their plans for graduate programs. The goal-oriented nature of the participants was likely coincident with their willingness to participate in the survey and so their responses may not necessarily reflect those of less motivated students.

Respondents all had busy lives. Ten of the participants were full time students, enrolled in at least 12 credit hours for the semester. Of the four taking fewer hours, two worked full time jobs, while the other two were actively involved in campus activities and regularly spent 15 hours or more on campus outside their classroom commitments. In fact, four of the participants were highly engaged in campus activities as officers and members of numerous student organizations including Model U.N., student government, and various honors societies and service clubs. Although these four represented only a quarter of the participants, this ratio was much higher than the overall number of students who served or volunteered in campus activities (Central Piedmont Community College, 2015). Most participants followed a pattern common to many community college students described by Tom as “you drive to school, do your stuff, and go home.”

All the interviewees reported positive experiences as students of CPCC. Some respondents, like Victoria, noted that CPCC was somewhat “high schoolish,” while others
appreciated the fact that they were treated like adults, and still others recognized the in-between nature of community colleges including Tom who appreciated that while “nobody’s going to hold your hand, they will pat you on the back.” Although some students noted negative aspects in specific classroom environments, their overall experiences met or exceeded their initial expectations and all expressed the belief that their experiences at community college would benefit them in their later academic careers.

**Data Analysis**

The three research questions that guided this study were each broken into interview questions for participants to consider. Each set of questions related to a different aspect of participants’ lives as students with respect to the locations where they attended class, studied, and learned. As the coding process evolved, it became apparent that student discussions of their classrooms and learning spaces were really discussions about power and control and how it was they negotiated their positions in different locations.

**Research Question 1: How do community college students construct their classroom spaces?**

All of the participants recognized that college classrooms were part of an institutional framework. Initial codes highlighted how students perceived their classrooms, particularly how they looked and felt. The first codes that emerged described the physical environment of classrooms and how students fit within them. Aligning participant descriptions of their rooms a picture emerged. Clocks and carpets, lighting and temperature, seat locations all figured into the descriptions offered by students. With additional prompting students discussed how
the physical environment felt when they entered the classroom and then when their instructor entered.

They’re pretty antiseptic. They’re all hospital waiting rooms. Even the podiums they have in here. I think the most boring person in the world designed that. Somebody you would not want to go to dinner with. They’re all boxes. They’re all inoffensively painted. There are no artifacts in them because the rooms are used for so many different things. You just want one cue, even if it’s from a different class. It’s really tough. Most of them [classrooms] in my community college experience are this way… Like this [gestures to the classroom around him]. Say if I missed a class and you were going to do the class for me and we’re in a room like this and my mind would as empty as this room here. It just wouldn’t be able to focus. It’s not that the room needs to be busy or near active things, but it can’t be completely empty. I think you just get a wash. (Calvin)

Students were eager to discuss what they did not like about their classrooms, but their responses focused on the physical aspects of the room. Initial codes centered on walls, carpet, clocks, podiums, and the like. Axial coding drew the physical descriptions into student perceptions of themselves in their classrooms, revealing the material culture of classrooms. Coming out of anthropology, particularly archaeology, the concept of material culture represents a recognition that the values, traditions, and customs of any society can be found not just in the behaviors and beliefs of individuals and groups, but is manifested in the things
that society produces as well. In this study, classrooms and study spaces represent part of the material culture of students. The cultural forces present in their rooms were explicitly recognized by some participants, but more often interviewees revealed a tacit understanding that their classrooms were more than the empty spaces they described.

As codes came together, categories emerged that emphasized the lines of power that ran through classrooms. For participants, constructing a classroom had more to do with adapting themselves to the room than altering the room itself. Their classrooms, as material representations of the larger culture, shaped and limited the behavior of students. Although every participant described their classrooms as “blank slates” (Cody), none of the interviewees felt they had the ability to draw on those slates. Classrooms were unadorned and meant to remain that way.

Middle school, you didn’t change the classroom unless the teacher told you to; high school you didn’t change the classroom unless the teacher told you to; elementary school, you’re normally a crackhead who is running around eating candy but, nonetheless, you didn’t change the room unless the teacher told you to. The most control a student, someone who’s taking the class will exercise in making themselves more comfortable in the space is where they’re going to sit. That’s the kind of control that they’ll exhibit and exercise. (Victoria)

Organized conceptually, the codes and categories that emerged led to seeing the power students saw and did not see in their classrooms. Participants were asked
directly who owned their classrooms. Some puzzled at the question, others were clear in their answer, but all of them responded by pointing to their instructors. Yet in examining their descriptions of classrooms before and after the arrival of their

<table>
<thead>
<tr>
<th>Codes</th>
<th>Categories</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpets/flooring</td>
<td>Physical environment</td>
<td></td>
</tr>
<tr>
<td>Chairs/desks</td>
<td></td>
<td>Ownership of classroom</td>
</tr>
<tr>
<td>Clock</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color/paint</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutional setting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lighting</td>
<td></td>
<td></td>
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<tr>
<td>Temperature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walls and hangings</td>
<td></td>
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</tr>
<tr>
<td>Adjust lights/blinds?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arrival time to class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chair/desk arrangement</td>
<td>Classroom without instructor</td>
<td></td>
</tr>
<tr>
<td>Comfort/discomfort?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laptop/phone use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same seat each time?</td>
<td></td>
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<tr>
<td>Seat location choice</td>
<td></td>
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</tr>
<tr>
<td>Comfort/discomfort?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact with students/instructor?</td>
<td></td>
<td></td>
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<tr>
<td>Distance from instructor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance from other students</td>
<td></td>
<td></td>
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<tr>
<td>Focus while in class?</td>
<td></td>
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</tr>
</tbody>
</table>
instructors an interesting dynamic emerged that revealed that the power in their classrooms was not solely invested in the instructor, in fact it became apparent that the classrooms themselves represented a source of power independent of who was in the room. Table 4.2 presents a list of the codes that emerged and the categories and theoretical statement that emerged from them. The columns are separated to indicate that the correspondence between the columns is not linear, rather there was significant overlap in the codes and often the same code occupied multiple categories.

**Research Question 2: How do community college students compare their classroom spaces to their learning spaces?**

Asking students to set their preferred learning spaces against their classrooms created a dialectic where each space could be understood in opposition to the other. Versus Coding enables researchers to emphasize the dual nature of a dichotomous problem (Saldaña, 2016). Although Versus Coding is generally used to establish moieties, that is, groups of people with differing views, in this instance it was used to establish differing perceptions participants had for the two locations where they were students. The advantage of Versus Coding is that it “makes evident the power issues at hand as humans often perceive them – as binaries or dichotomies” (Saldaña, 140, 2016).
Table 4.3: Versus Coding

<table>
<thead>
<tr>
<th>Emergent Category</th>
<th>Classrooms</th>
<th>Study locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sphere of influence</td>
<td>Personal space</td>
<td>Personal and public space</td>
</tr>
<tr>
<td>Sense of ease</td>
<td>Discomfort</td>
<td>Comfort</td>
</tr>
<tr>
<td>Access to resources</td>
<td>Limited</td>
<td>Open</td>
</tr>
<tr>
<td>Role for self</td>
<td>Inertia</td>
<td>Agency</td>
</tr>
<tr>
<td>Perceived control agent</td>
<td>Instructor</td>
<td>Self</td>
</tr>
<tr>
<td>Locus of control</td>
<td>External - classroom</td>
<td>Internal - self</td>
</tr>
<tr>
<td>Identity</td>
<td>Student</td>
<td>Self studying</td>
</tr>
</tbody>
</table>

Versus Coding (Saldaña, 2016) highlighted the oppositions that emerged during interviews with students. In the coding process, descriptors for classrooms were aligned in opposition to terms ascribed for the locations participants preferred to study. A clear dialectic arose from each participant’s descriptions of their classrooms and study locations. Coding for each location in opposition to the other revealed lines of power students experienced while in their classrooms, some of which they recognized and others that seemed to go unnoticed in their descriptions, but which underlay their responses.

Study locations can be understood as agentic places; sites where individuals feel in control of their own actions and the space around them as opposed to classrooms where students did not feel they had any control beyond their own desk. Part of this sense of control is the social sphere in which individuals were located. In the places where they study,
participants discussed their agency in terms of the ability to control their environment, whether it was listening to music, having a television playing in the background, adjusting the lighting and temperature, or moving about at will. Participants understood they had access to resources around them, even in public locations where they did not necessarily have control over the setting. Their sense of agency extended beyond themselves to the room.

Entering a classroom, students surrendered part of their agency. They had the ability to choose where they sat, but once seated, they passed from active to inert. Their agency now only applied to their desk and the belongings they carried with them. The room was beyond their reach. Instead of being able to adjust the environment to suit them, they now had to adjust themselves to the conditions in the classroom as they were. “Walk in a classroom, instant like, you go into student mode.” (Victoria) As Aysha observed “we’re college students, it’s not like we have a choice in how the room is set up.”

When asked to compare study locations to their classrooms, participants unveiled the dialectic at the heart of their perceptions. Although not always aware of all the sources of power present in their classrooms beyond the presence of their instructors, students demonstrated an intuitive understanding that the agency they had in their study locations was not present in their classrooms which contributed to their sense of discomfort which was not physical, but social.

Where I like to learn versus, like, school? Because school is not where I like to learn. It’s not. I like to feel secure and comfortable. I don’t like nothing going on. Now some people like it, I think it depends on the person. I
like music when I learn, I like a nice comfortable chair, I like things I can look at in the room so if I’m stuck on something I can look away, think about something else for a bit then get back onto that subject. As long as it doesn’t draw me away from that subject entirely for a long period of time. A room like this? I don’t know if I could study in this room. That whole “there’s nothing in here to distract you so all you’re going to have is what’s in front of you. We don’t want anything to distract these kids other than the other kids in the class.” So I mean, I don’t think it really stops kids from learning, but it might kind of put kids in a daze, where they zone out. I think with a distraction free room, kids are going to create their own distractions, maybe in their head, and cling on to that because it’s kind of an escape from whatever is uncomfortable to them. If the room was more comfortable, they wouldn’t feel the need to move away mentally from that. (Chris)

When asked to consider how it was they lost agency while in their classrooms, every participant pointed to the presence of their instructor. In all of the interviews, respondents contended that whoever occupies the podium at the front of the classroom has control of the room’s environment; the lighting, sound, and even the has the right to permit or deny students the ability to move about the room. “It’s the teacher’s realm, so we don’t touch the lights. Whoever’s in charge of the room controls the atmosphere, and it’s not us [the students]. (Tom)
Within the coding, however, a deeper understanding of how students lost their agency emerged. Students discussed how they felt within their rooms and while they focused on the instructor as the source of power in the room, it became apparent that they surrendered their power even when the instructor was not present. It was not the instructors, but the classroom itself that became the locus of control. Students did not give their power to a person, so much as they invested it in a place.

It’s just standard. This is what you expect. It’s very formal. This is what it is, this is formal. Okay, this is it, you come in, you sit down and not to say that we just sit here and we listen. The way that it looks, we’re not intended to interact with each other. I’ve tried to talk to the people next to me in classes and they don’t usually talk much. We’re not here to talk, we’re here just to do the class. Eyes forward. It’s understood that this is the way our classrooms are set up and this is how you’re supposed to act, and that’s why in elementary school you’re supposed to look at the teacher and everything is, you know, they put them in pairs or threes or whatever, but for the most part, they’re still all facing one direction. It’s not intended for you to interact with little Susie back there. Your focus is on me [the instructor] and what I’m doing. (Regina)

Research Question 3: What strategies and methods would allow community college students to make community college classrooms into learning spaces?

During interviews, participants were asked to consider what would make it possible to change their classrooms. As coding developed, what emerged is that resistance to changes
in the classroom came at students from multiple directions; from their instructors, from fellow students, and from the society-at-large as represented by the material culture of the room and their experiences in a lifetime of classrooms.

Even before interviews began students demonstrated deference to both the school and individuals who represented the institution. While arranging interviews, potential participants declined to set meeting places, instead they allowed the interviewer, who was not their instructor but is known as one in the college, to establish the location for discussions. For convenience, initial meetings took place near the Student Life office where students first found the notice seeking participants for the study. At the initial meeting, the interviewer asked students where they would like to meet for the subsequent meeting. In every case, students again deferred to the researcher whose suggestion to meet in the same location was readily approved. At the interviews, participants were offered the opportunity to select the location for the meeting which they all declined, opting instead to follow the researcher as he walked the halls seeking an empty classroom. On entering the classroom, students again looked to the interviewer for guidance in selecting a seat. Participants, then, were students, even during the interviews.

Conceptually the picture that emerged from student resistance to change was a cultural landscape of power within classrooms. The maps students created were internal and so reflected their own perceptions of the space around them as much as the physical environment itself. What emerged in the process of analysis is the material culture of the classrooms and how it is students responded to the power in classrooms without necessarily
seeing it. Figure 4.1 represents a model of the material culture of classrooms, where student experiences, expectations combine with the expectations of their instructors and fellow students to create a culture of the classroom, which in turn feeds back into student perceptions of the room and serves to limit action.

**Figure 4.1: Forming the Material Culture of a Classroom**
A number of participants explained the mental gymnastics involved in making even the slightest changes to a classroom’s arrangement.

If the one person gets up and decides to do it [move a desk], everybody else is going to look around and you, I’ve seen this happen before, because I saw one kid stand up and try to get everybody to do it to play a prank on the teacher, and you just watch everybody look around, they kind of meet eyes and they’re like “I’m not going to do that. Are you going to do that? If you’re going to do that, I’m going to do that.” That was like the mental conversation they’re having. “If you do it, I’ll do it. Okay, you’re not going to do it. Then they all just kind of look at him like he’s crazy. It’s always easier to convince like one or two other people than it is a group. (Victoria)

As participants pondered the possibility of gaining agency in their classrooms, some respondents were able to recognize the possibility of negotiations for power and the limits of them.

It’s not so democratic that everyone owns it, but it kind of is. At the end of the day it’s the teacher’s overall rule because the teacher decides who passes, who fails. So everyone should do what they can to appease the teacher, but without students, the teacher doesn’t have anything. There’s no point in the teacher being there if he’s not teaching anybody. There is a balance of power there. It doesn’t have to be 50/50, but it can’t be that the teacher
controls everything and the students have nothing. It can and it can work
sometimes if the teacher says “there’s no exceptions” and they adhere to it,
you like “you miss this class three times, you fail, you’re done.” It may be a
little up for grabs in the beginning, but after that, it’s absolute control.
Dictatorship’s not always a bad thing, but it’s not the happiest kind of place.”
(Tom)
Given the opportunity and freedom to change their rooms, most of the participants
suggested physical changes, but a few of them addressed the social climate of the room and
in some ways confronted the material culture of their classrooms.

Sometimes, whenever there’s a shake-up in the middle of the semester,
that’s fine. You know, the ice is already broken, we’ve settled in, we’ve all
got a little map of each other, you know who they are. We’ve mapped out the
classroom, we know where everyone is and who they are. Maybe if you move
that around. Associate with someone else… People get established in their
space and they develop a sense of comfort, I’ve also created my own
classroom out of it. You know, what I can see, who I can interact with, who I
can’t talk to because it would be socially awkward, you know, to point out
somebody in the middle of class and give them a smile. I’m created now by
this spot. These things are involved in my room. It’s a different room for
everyone. (Calvin)
In the coding process, the different rooms students discussed were highlighted, Acknowledging that everyone experiences a different classroom, students and instructors may find common ground for negotiations over their use or conversely they may continue following long-established routines of classroom behavior and opt out of opportunities to change. Analyzing participant perceptions not only revealed the power and resistance students felt in their classrooms, but also pointed at possible sources of agency for them, within limits, often those set by the material culture of the classrooms.

People are comfortable with the way things are. If you change it too much, it might make things more difficult. Some people don’t want more power. I feel like, not like everything’s been discovered, but if there was a way to do something, it would already be done. For most things anyway. There’s not so much filibustering in the world as we think there is. As far as this, as long as you have people who aren’t clones, there’s going to be something that works for them that doesn’t work for somebody else. So it’s more like, not so much a happy medium, but what more can you do to make it comfortable for everyone? But you can’t leave anyone behind. I’m not saying these efforts are futile, but there are limits. (Tom)

Findings

As participants discussed their experiences in community college classrooms, they located themselves within a larger framework where their lives, inside and outside of educational institutions, situated them within the dimensions of their classrooms. The
following narrative was designed to allow individual student voices to be heard as their responses were collectively analyzed and organized into categories. The narrative follows the research questions through a progression that begins with participants discussing their classrooms, then the places where they study. Next students compared the two locations. Finally, participants were asked to consider how it is they could change their classrooms so they were more like their study spaces and finally to reflect on what prevented such alterations. At the conclusion of each section of the narrative, theoretical statements are presented that each provide one element of a working conceptual model which will be presented at the end of the chapter.

**Constructing Classrooms**

“It's a square box in a bigger square box.” - Regina

The first set of questions asked students to consider how they situate themselves and their learning within classrooms. What makes a room a classroom and how do students place themselves within those spaces? A classroom is defined here as the physical space within a school where a scheduled class meeting with an instructor and students occurs. The process of culturally constructing a classroom begins with entering the physical space of the classroom. At the start of each interview, participants were asked to discuss how it is they arrived at their classrooms. They were also asked to describe the rooms and to offer a sense of the physical and mental settings of their classes. Following their initial responses, students were then asked to describe the room once instructors arrived and classes started.
For the most part, participants found their classrooms at CPCC as rather drab, generic places. Words like “bland,” “antiseptic,” and “sterile” found their way into nearly every discussion about classrooms. Interviewees elaborated on the institutional nature of school buildings, comparing them to hospitals and warehouses. As Bo noted, “there’s not a lot of character here.” Although nobody reserved praise for their classrooms, the spaces were generally recognized as hospitable places, safe and well-designed for general educational purposes. As Calvin noted, “they’re all boxes, all inoffensively painted. There are no artifacts in them because the rooms are used for so many different things.” A couple respondents saw more threatening purposes at work and offered correctional facilities and dungeons as their models, but their comments were more about the depersonalized nature of the locations than any perceived hazards and none of the students described situations where a room made them feel uncomfortable or unwanted.

When asked to describe their classrooms in more detail, few discussed the atmosphere of the rooms, instead most participants focused on physical features. Eight respondents brought up the carpet, or in one case, lack of it, in their rooms. Carpet is a rather innocuous feature and one that did not turn up when interviewees discussed other locations, but considering the institutional feel of most classrooms, it makes sense that they brought up flooring, especially when it stands out for being both “ugly” and “boring.” Nothing speaks to the institutional nature of a space like industrial grade flooring and the fact that more participants mentioned it than did not, indicates the general recognition of the nature of their classrooms as functional, institutional, and depersonalized places for learning.
Walls also figured into student assessments of classrooms. Unlike flooring which is limited in its ability to express individuality, walls are easily personalized and the lack of such modifications stood out to every participant in the study. Walls were “uninspiring” or even “horrible.” A few of the students suggested that the blank walls helped limit distractions within the classroom, although Cody argued that the featurelessness of the walls was a distraction in its own right. He noted that in one of his rooms, lines on the wall separating segments of the room continually drew his attention away from the class, as if provoking him to imagine that something more should be there. Calvin reinforced Cody’s point, noting that “space that is empty makes my mind empty.” Laura saw a deeper purpose in the lack of distractions in her classrooms, suggesting rooms are designed so students “pay attention to this, not anything else” and that students are not supposed “to be thinking outside of the box because our education system is based on tests” and “learning about other people’s opinions.”

One feature of walls that a third of the students mentioned was clocks or in some cases the lack of them. For a couple students, Toni and Chris, clocks represented a form of control, especially when placed where only the instructor could see them. Calvin brought up the fact that the clock in one of his rooms was broken and dismissed the presence of clocks as important given that students all carry phones and laptops that have the time prominently displayed, a fact that might explain why only a third of the students bothered to mention clocks. However, as Chris noted, clocks let students know how a room will be managed and so represent a point of power. Although class duration is already established, the use of that
time is in the hands of the instructor. Walking into a classroom, students surrender their power over time to the instructor and the clock.

Clocks, and their location within a room, are visible representations of power over the time of others. (Power over time itself is another matter entirely.) Although students with phones and watches always have access to the time, the negotiations for the control over the knowledge of time still begin with the location of the clock. If only the instructor can see the clock, the knowledge of the time and its use is solely in the control of the instructor. Even if students can check the time on their own, the understanding emerges that only the instructor is supposed to know the time and is in control of it. Students who look at the time do so surreptitiously, recognizing they are challenging the instructor’s control of the classroom. When everyone in the room can easily see the clock, there is an understanding that everyone in the room is on the same schedule and has access to it. That is, power over time is shared to some degree. The same may be true for a room where no clock is present. Although the location of a clock may not figure into the consciousness of students as they enter a classroom, it does figure into their overall impression of a room and their place in it.

Classroom furniture and its arrangement entered into all but a couple of discussions. All participants deemed the chairs and desks adequate, some even complimented the school for its choice in chairs, appreciating the greater comfort compared to other school chairs in their experience. The focus of comments on furniture had less to do with the actual pieces but concerned how chairs and desks were arranged within a room. Students all described what could be considered the traditional classroom setup: space at the front of the room for the
instructor and all the chairs and desks lined up to face that space. As Regina expressed, “we’re supposed to be facing the front.”

When asked to describe the arrangement of classroom furniture, all of the participants noted how rooms were organized for them, not by them. Like clocks, the arrangement of desks and chairs is a representation of the power in the classroom. While few instructors actually organize the room furniture themselves, they do take advantage of its arrangement, standing at the front of a room where all students are facing them. Upon entering a classroom, students are guided by the placement of desks. When prompted to discuss their role in arranging classroom furniture, most participants expressed a passive acceptance that they had to fit themselves into the room and not vice versa. Chris spoke to this feeling when he noted “I don’t feel like I have the power to move things around how I want.”

The one element of control students did have in the arrangement of the room was where they sat. None of the participants indicated they had assigned seats in their classes, though all but Laura mentioned that once they selected a seat on the first day of class, they generally stayed in the same seat for the remainder of the semester. All of the students referred to where they sat as “my seat,” signifying that they had taken some ownership within their classroom. While this may seem inconsequential, students were able to establish a place for themselves in a room that was not theirs. Even though most students felt as Cody who indicated “I don’t feel like I have the right to change anything,” they all gained a small measure of control over a room where they had little power.
Where respondents sat in their classrooms varied considerably. Each student, however, mentioned the same factors when discussing their seat choices. The primary factor seems to be the need to have access to both the instructor and the front of the room where material was presented. For six of the participants the need to pay attention meant sitting at the front of the room, which kept them away from other students and possible distractions. A secondary factor mentioned by seven of the participants was the importance of a “socially strategic spot” (Calvin). Balancing the need to connect with both the course material and other students led the majority of the students to choose seats in the middle or back of the room. Five students mentioned they preferred a seat that offered a view, if one was available, hopefully near a window, though Calvin and Aysha also noted that the view could be of other students as well. Victoria and Cody both use their laptops in class and so seek outlets to sit near.

Another aspect of seating choice not mentioned specifically by students but which runs through their responses is the power of the instructor in the room and their reactions to it. In choosing their seat locations, students acknowledge the power of the instructor and balance it with their own need for the space to create their own power, even if it is limited. One way to gain power, especially for individuals who do not actually have power in a situation, like students in a classroom, is through distance. By putting space between themselves and their instructors, students put distance between themselves and the power of the instructor. In that space, students can chat with neighbors, doodle, access their personal technology, or even check the clock, and so give themselves room to behave as they wish.
They may be in a classroom that is designed to limit their actions, but sitting in the back creates distance and so allows them some freedom.

Some students, like Zaman and Regina, recommend against this distance. They choose to sit up front. While they lose some of their freedom of movement, they give it up willingly in exchange for full access to the instructor and the material. Laura noted that “sitting up close allows you to focus” which is in part promoted by the proximity of the instructor. Regina discussed that she uses the power of the instructor to help discipline her behavior. Early in her career she sat in the back of rooms and allowed herself to be distracted, or often was the distraction herself, which resulted in poor performance. As an older student, she recognizes she still has the capacity to be distracted, but by sitting at the front, she removes the possibility of that happening. The added benefit is that even when she is running late, “there’s always a seat” at the front. Sitting in the front alters the dynamic of the negotiation over power as well. Students at the front can make greater demands on the instructor and their accessibility does give them the ability to direct the class to some degree by capturing the attention of the instructor more readily than the folks in the back of the room, many of whom are not wishing to draw attention to themselves in the first place.

Once students select their location in a classroom, they stay put. Every respondent in this study acknowledged they sat in the same seat all semester. Six participants noted they come to class early specifically to get their desired seat. When asked to reflect about why they sat in the same location for the entire semester, some students offered comfort as the reason. The comfort they felt was not physical, but had more to do with their state of mind in
the classroom. As Aysha explained, sitting in a new seat “would completely switch up the whole environment for me. You’re so used to seeing everybody in the same spot and then in a different place you see them in a different way.”

A student’s desk becomes their space within a place that is not theirs. Claiming a seat provides students with some sense of control in the classroom. It situates them not just within the material world, but also creates a stable space for them to negotiate the power of the instructor and the institution they encounter within the classroom. Calvin suggested that once he establishes his seat “I’m created now by this spot.” Tom noted that “the power to choose when I go to class” and “getting to choose where you get to sit; it’s not gigantic, but it’s important.” The instructor may hold greater power over the classroom, but students have power in the space where they are. Sitting in their place gives students some means to control what happens in the classroom, even if only in a limited sense. Tim pointed out that at his desk “I’m over in my little space, I just feel like I’m by myself. I’m very comfortable in that one spot, if I were just randomly forced to move somewhere else it might be uncomfortable.”

Chris added that “if you’re comfortable where you are, you’re not going to want to move out of that comfort zone.”

Physical comfort was not an issue for any student. While decrying the lack of personality of the rooms, nobody felt discomfort. Chairs, desks, room temperature all conformed to student expectations. A couple students, Bo, who went to school 50 years ago with wooden chairs and without air-conditioning, and Zaman, who during his childhood in Afghanistan did not even have classrooms, much less desks, felt classrooms were too
comfortable, encouraging students to relax instead of pay attention. Tom also suggested that “a relaxed environment can get in the way of the teacher’s process.” A few other students agreed with Zaman and Tim’s assessment that rooms might be more effective if they were less comfortable, though nobody was clear on just how rooms should be made more uncomfortable and yet not too uncomfortable for a classroom setting. Most participants agreed with Laura’s assessment that she has “trouble focusing if I’m not comfortable.”

Physical comfort may actually be a piece with the institutional setting, inviting students to feel at ease, even passive. Although a discussion of walls, floors, and furniture is certain to induce somnolence, it is important for this study to begin with an examination of the basics of rooms to understand what it is students are perceiving within their classrooms. A few of the participants believed the drab flooring and blank walls of their classrooms fit within a deliberate pattern in educational environments as they progressed through their schooling. Each recognized that as young students their classroom walls were covered in inspirational posters, artwork, maps, and other “pleasant distractions” but realized, as Jack did, that “as I went through my academic career, the classrooms got more and more bland.” Participants also recalled interesting seating arrangements in primary schools, often in small groups around tables and that there were no end of distractions for them. Posters, chalkboards with multiple colored chalks, fish tanks, bird cages, activities scattered all around them. As students moved into middle and then high school, the distractions began to disappear and finally at the community college they were in rooms where distractions were absent entirely.
As Laura noted, “there’s nothing inspirational I see hanging around here. We have a fire exit plan, have to make do with that.”

**Constructing a Theory: The First Dimension**

Examining responses students provided regarding their classrooms, the first dimension of the grounded theory that emerges is the recognition that **classrooms are made for classes, not for students**. As constructed spaces, classrooms are stages where limits are established for what can occur. In their discussions of the mundane aspects of their classrooms, students described themselves not so much as actors in their classroom spaces but as members of an audience awaiting a performance. As they enter their classrooms, individuals become students assuming an identity that is fairly passive and often meant to be so. As Chris shared, the school “is an institution, it’s not really geared for an individual.”

The classrooms and the building itself are considered featureless plains by students who herd themselves into their spaces. The institutional nature of classrooms can be considered a contributing factor in students’ sense of dislocation. That is, classrooms are not a “here” or even a “there” but rather a “nowhere,” a depersonalized, interchangeable setting that can serve any number of purposes. There is nowhere or nothing to which students may attach a personality to a room and make it a distinct place for themselves. Instead, the utilitarian nature of classrooms promotes a detached attitude towards the room and the class. So what happens to the room once the instructor arrives?
Constructing a Class

“Until someone gets in there who’s teaching, it’s not really a classroom.” - Victoria

After discussing their classrooms, participants were asked to describe the classes that took place in those rooms, in particular, students were asked how it is the presence of their instructors affected their perceptions and behaviors. All of the participants generally agreed with Laura as she explained “you only go there for the instructor, you don’t go there for anything else.” In other words, it was not the room but the instructor, or more specifically, the instructor’s course to which students attached and which guided their behavior more than any other factor.

As they considered the role instructors played in their classrooms, students reflected on the basis of power in their classrooms. Participants were specifically asked who owns their classrooms. In their responses, ten of the students identified institutions, either the school or the state, as owners of the classroom. A couple participants, Cody and Bo, noted that the school itself is owned by taxpayers and so belongs to the students. Despite the explicit understanding of who built their classrooms and where the resources came from, students, in their descriptions of classroom operations indicated that instructors held most, if not all, of the power in the classroom and so could be considered the owners of the class or at least the agents who represented the authority of the institutions in their classrooms. As Chris explained, “the instructor owns the room, I don’t even have to think about that… this is their space.” Regardless of their general understanding all the students recognized, like Toni, that “the school does not belong to me.”
To gauge the impact of the instructor in the classroom, participants were asked to describe the mood of the room before the teacher arrived. Victoria expressed “it’s like a waiting room,” a sentiment shared by other participants including Bo who noted “you walk in and nobody’s saying anything” to which Regina added that “they’re doing their little phone thingies” and were not really engaged with the room or other people in it. Even when the room is empty students have a distinct sense that it is controlled by the instructor, although as Cody noted “the “classroom doesn’t really become different until the teacher walks in” which allows for limited autonomy.

One visible aspect of where power resides in a classroom is lighting. Eight respondents specifically mentioned the lights and explained that light settings belonged to their instructors. Tom offered that “lighting is akin to a teacher’s mood” and that the classroom “is the teacher’s realm, so we don’t touch the lights. Whoever’s in charge of the room controls the atmosphere.” Students noted that lighting could be seen as a measure of how an instructor would approach the material and the classroom. Chris suggested that some instructors favored darker rooms to promote a kind of passivity among the students. A couple students believed that before the instructor arrived they could determine light settings for themselves and often did, even if other students were already in the room. Regina, however, spoke for most of the participants when she indicated that prior to the arrival of the instructor “we sit there in the dark” waiting for the instructor to come in and determine the lighting. Five respondents mentioned that even if they are the first in the room, they do not touch the lights, respecting the power of the instructor over the lights and the room reinforcing Cody’s
statement that “you would be surprised, like how many kids walk into the classroom without turning on the lights.”

Like lights, students view the arrangement of furniture in a classroom as a right reserved for the instructor. As mentioned previously, students feel free to select their seat, but none of the participants in the study feel they have the right to alter the arrangement of desks in the room, not even their own. A few participants suggested it might be amusing to position a room’s furniture, but they were aware doing so directly challenged the power an instructor has over the classroom and were reluctant to go against it. Besides, as Aysha added, moving chairs “is just too much work.” Students also mentioned sanctions, real or perceived, from other students who “would think that a student has lost their mind if they came in and started rearranging their room.” (Regina)

When they walk into their classes, students find their seats and prepare themselves for class. Part of their preparation is guided by the room which directs their attention towards the front. Even before the instructors arrive, students already have given their power to the room, specifically to the spaces the instructor will occupy. As Regina observed, “everything is aimed at the professor.” Simply by entering the space reserved for them, instructors are able to assume power that has already been placed there by students through the arrangement of the room. The lights, the desks, even the window treatments are subject to the instructor’s control. Instructors also have access to materials specifically reserved for them, podiums, computers, projectors and the like which reinforce their power over the room. Without access to the physical aspects of a classroom, students become part of the space, subject to the
influence of the instructor’s power where they have no choice but to “let the teacher have control of the room.” (Jack)

Tim’s statement “the instructor I think is what makes the classroom the classroom” represents the sense all participants expressed about the role of the instructor in creating the culture of the classroom. While respondents debated whether they had autonomy in the classroom prior to class, they all recognized, like Cody, that “once the teacher walks in your power over the classroom is gone” and any power students felt they had transferred to “the boss of the room” (Zaman). As Justin added, “the teacher dictates where every lesson is going to go or what you’re actually studying, how much time is going to be spent studying it by the entire class.”

Students and instructors, through years of cultural experience in schools, expect that the classroom and its management will be guided from the front of the room. It is “the instructor’s use of the room that affects the effectiveness of the classroom.” (Jack) In shaping the culture of the classroom, Aysha notes “it kind of goes back to the professor and how the professor makes it feel... how the professor alters that environment affects how you’re going to feel in it.” Bo added that “instructors can bring you out or bring the people out so that makes a big difference.” Instructors, however, differed in how they used their power in the classroom and “who they allow to own it [the classroom].” (Aysha)

All of the participants discussed how the better instructors were able to use the power the classroom and the students gave them to develop an environment that was engaging. Every respondent also mentioned instances where instructors used their power in ways that
were less conducive to learning, either by being too assertive or, more commonly, being too timid or tired. A few participants suggested that when instructors did not assume power in their classrooms that students would, often to the detriment of all involved. Zaman recalled a few instances where a student would deliberately disrupt the class and noted that instructor responses varied. “The reason that some instructors don’t say anything to the students is because they want to keep things calm and quiet,” though that strategy did not always seem to work. Aysha added that instructors needed to assert themselves, “someone who demands attention, you’re going to get it… but if you don’t use that you kind of lose it… a really timid professor allows students to control the environment.”

From the perspective of students, some instructors appear to have the need to “feel like the big boss man.” (Jack) “If the teacher has, or even is perceived to have a ton of control, then students will feel less apt to ask questions about the stuff they don’t understand.” (Justin) Cody believes the more authoritarian instructors “are like high school teachers basically,” enforcing rules that imply “you’re not an independent person right now, like ‘you are here to adhere to everything I say. You can’t eat, talk, drink. You can’t play around on your computer. If I see you playing around on your computer, I’m going to tell you to close it and if you don’t close it, I’m going to tell you to leave.’” (Cody)

Chris suggested that more effective instructors are able to share their power so “students don’t feel like they’re at the mercy of the instructor.” Tom described his better instructors as those able to promote “a very mature atmosphere” where they “really let you be your own person. Nobody’s going to hold your hand, but they will pat you on the back.”
Aysha also discussed how effective instructors allowed students to “really feel their presence” and who create “classes where you really are active in. It makes it feel different, you’ve got something to focus on, you got everybody paying attention. You learn a lot more.”

Nearly all of the participants noted the power of instructors in their ability to affect the mood of a classroom which Justin observed “is very dependent on what the instructor does, how the instructor carries him or herself, especially those first couple classes where people are acclimating to the class and subject and how open the instructor is to taking questions.” Tim suggested the mood of the instructor and the room are linked. “If their energy level’s down, they are just tired, then you feel a drop in what you’re going to learn. People are more likely to start talking or whatever.” (Tim) Cody noted that in some of his classes it seems “there’s nowhere for the teacher to feel comfortable” which affects the atmosphere of the room. “If a teacher can’t feel comfortable, how should I feel comfortable? You know, when you see a teacher nervous about a classroom, why shouldn’t you be nervous a little?” (Cody) Jack suggested the mood of an instructor can be deduced from how they dress. “If you dressed up it shows that you are trying to be over the students… It kind of puts them on a different level over the students. If you dress casually… people see more of an equal.”

Although students generally agreed that instructors held the power in the room, participants also recognized that instructors were limited by the room as much as they were. As Cody pointed out, “the instructor’s going to walk in, he’s going to go to his podium, he’s
going to put his stuff down, he going to turn on the projection. It’s preset.” Victoria observed how instructors “all really love podiums,” a sentiment that matches comments made in nearly every interview indicating that instructors, like their students, follow patterns in their use of classrooms. Justin added that his instructors all “stay behind the podium and that gives a much more confined, sterile atmosphere than a person who likes to get out and talk.”

Instructors are drawn to the front of the room often letting the room itself, through the positioning of the podium and all of the technology located there, guide them to their place. Jack observed that in many classes the instructor “is not even in the center. The board is centered, but he stands off to the side” allowing technology to take center stage. In establishing the mood of a room, instructors, like their students, allow the room to shape their behavior. As teaching has become more reliant on technology, many instructors are now tied to their podiums so that everything that happens in the class revolves around the podium-bound instructor, where, as Justin noted, “there can be a tendency for the instructor to stay behind the podium interfacing with the computer a lot” which he found “very discouraging from a student standpoint, because you don’t want to interrupt the instructor doing something important.” As Cody observed, having instructors rooted to computers at the front of the room “works for the aspect of a teacher to teach, but not for a student to feel comfortable.”

Some participants actually preferred their instructors to stay at their podium so they knew where they were at all times. Six of the respondents indicated they selected their seats specifically with the location of the instructor in mind, with an eye to a minimal amount of distance between them and their teacher. Having instructors walk around the room or sitting
in back creates the potential for discomfort which for Laura would “feel like I was being studied.” For Toni, continually turning around to see the instructor creates physical discomfort. Victoria is more concerned about what is on her laptop, and that if instructors “started walking out, say down that row, it would definitely affect how people sit in there… people who are like me who sit, kind of towards the center… will all of a sudden move to the wings.” She also noted that “people who don’t pay attention don’t want to be near the teacher” which is harder if the instructor moves about. Zaman, in a response similar to those of a number of his colleagues, just prefers that “everything is at the front” of the room.

**Constructing a Theory: The Second Dimension**

Students recognize that not only are classrooms not built for them, they are not necessarily built for their instructors either. As Jack asserted, instructors “just kind of expect the room to be this way and they know where their place is, same as the students.” Although the power in a classroom does have physical dimensions reflected in its construction, especially with the placement of technology, it is cultural power that determines the dynamics of the classroom. All of the participants of this study discussed how “it’s instilled in us that this is what a classroom is from the very early ages.” (Tim) As both students and instructors enter a classroom, they also enter into a predetermined role they occupy and play, either in the back or the front of the room. Instructors vary in their approaches to teaching, but in discussions with participants for this study, none of the instructors varied in their uses of the room.
Students and instructors base their behavior in a classroom on expected roles that are established and reinforced by the space itself. Having sat in classrooms since they were small, students know what to anticipate in a classroom even before they enter it. Once they enter a classroom, the space itself reinforces the understanding of both students and instructors of what is expected of them. Students understand they are there to “be the audience” for the class that is about to happen. (Victoria) For their part, instructors are expected to be at the front of the room and stay there. The placement of technology resources and instructors’ reliance on it makes sure they do. Even with their authority, instructors conform to roles established by classrooms and reinforced by the expectations of students there waiting for them. Recognizing the power of a classroom, then, requires not only an understanding of the control an instructor possesses, but also how the room is itself shapes behavior. **Entering a classroom, instructors and students occupy roles that have been culturally established and embedded within the place itself.** Neither instructors nor students had any say in the construction of the classroom, but they are its chief occupants. The question then is how would students construct a place for studying?

**Constructing Learning Spaces**

“My space is definitely the best place for me to learn.” - Chris

In an effort to better understand their perceptions of classrooms, participants were asked to describe their learning spaces, the locations where they prefer to study for their classes. Student responses revealed a variety of settings. Six named home as their chosen learning space, while Aysha and Tim preferred studying anywhere but in their homes. Eight
of the students, over half, listed public locations, including three who named their classrooms, as the places they studied most effectively. Eight of the participants, whether in a private or public location, required quiet for studying while a few students like Chris and Cody preferred to have music in the background. Five specifically mentioned the need for a computer in their learning spaces, while Zaman viewed computers, phones, or any other technology as a distraction and counterproductive to his studies.

Regina stated “I don’t like to study with other people around me, that just distracts me,” which was a refrain heard in every interview. A common theme for all students was the need to be alone, even if they chose a public location. What varied was how students defined their concept of being alone. Chris stressed that he “wanted my space how I wanted it,” a sentiment shared by all participants in this study. Given the individualized reactions to questions about their preferred learning spaces and how these relate to their later visions of ideal classrooms, participant’s responses are explored in some detail.

Aysha’s study location was a coffeehouse where she could find a “warm, inviting place” with “a lot of room, a lot of light, and it is warm.” She emphasized her desire for warm temperatures several times, noting that some of her classrooms are cooler than she prefers and finding a location that is warm, even if she is not personally in control of the thermostat. What she finds is that “at a coffeehouse you’re away from all the things what would usually distract you” at home.
Bo’s study spot is a “big, comfy chair” at home along with “a good light and a cup of coffee or tea.” Like Aysha, Bo also noted his desire for warmer temperatures than he normally finds in his classrooms.

In setting up his learning, Calvin admits “I’m terrible at studying, so I go find a happy place to study.” A happy place for Calvin is one that offers a few distractions to keep him engaged, but not too many that they prevent his studying. Coffeehouses do not work for him, partly because as a musician he pays too much attention to the background music and “there’s too many pretty girls walking in.” Libraries work best for Calvin where he can “do things I like to do, like reading the news,” but when it is time to study he can be “completely alone” in a spot that is “completely quiet.” Despite the need for quiet, like Aysha he needs the presence of others since a “space that is empty makes my mind empty.”

When studying, Chris seeks out “a nice comfortable chair.” Like Calvin, he likes to have a diversion handy “as long as it doesn’t draw me away from that subject entirely for a long period of time.” He finds minor distractions useful “so if I’m stuck on something, I can look away, think about something else for a bit, then get back onto that subject.” As an example, Chris noted how he likes to have music in the background, but he chooses “instrumental music, something without words, so I’m not distracted from my reading.”

For Cody it is not about the chair, he seeks out a table which can be at school or at home, preferably in a corner where he can see others and they can see him, but “where they’re not going to approach me.” He needs quiet, no music, and very few distractions,
especially other people. “If someone came up to me and was like, sitting at my table, even if they weren’t talking, their actions would just distract me.”

Jack describes himself as an “outdoors person” and when studying looks to be “outside, away from a lot of industrial stuff” even when the weather is not cooperative. When it is raining, he still wishes to be “near the rain” often under a gazebo in his neighborhood. If he is at school, Jack goes out to benches at a nearby pond.

As a former home-schooler, Justin finds the kitchen as a classroom set up that his mother used while teaching he and his sister still works well for his studying. Justin eschews the comfortable chair preferred by other participants, preferring a desk his parents bought to create their home classroom. He likened his study space to a “much more confined type of classroom,” where the structure found at school can reside in his home and guide his learning.

“Depending on what I am doing, I like to be somewhere with a computer” Laura says of her studying location. She likes “learning at her own pace” and moving from topic to topic “doing this and then I’m doing this, and then I’m doing this.” Overall her strategy towards studying is to “do as little work as possible for the best grade possible” and she actually seeks out distractions to keep her interested in whatever subject she is trying to learn.

Regina is “not one of those Starbuck’s kind of people” when it comes to studying. “I don’t like noise and I don’t like to study with other people around me.” If at home, she seeks out “a quiet place, away from my child” and if she is away, then she likes one of the private study rooms at the school’s library. She sometimes will study in an empty classroom, but as
soon as people arrive, “that’s disruptive to me” and so she will move off to find somewhere secluded and quiet.

Tim admits to being easily distracted, especially at home with a new puppy and a fiancée, and so prefers to study at school. If available, he likes to study in the rooms where his classes are where he is able to “playback what’s said from the professor during the class” which he finds especially useful when he “is learning to take a test, because, obviously, the instructors write the test and I have to know what they want me to know.” If the classroom is being used or if he just is looking for somewhere to read, he likes to go outside where there are not many people and he can find a quiet place and “zone everything else out.”

Similar to Tim, Tom insists “I do my best learning in the classroom, mainly because I don’t like to do things at home.” If he needs to write a paper, he likes to be at home where distractions like the TV actually help his focus. At home, he goes to his bedroom, “the messiest room you’ve ever seen” but he can “control the temperature there. Noise level is something else I can control too and whether it’s going to be loud or quiet or light or dark.” When he needs to learn material he likes to be in the classroom. If the actual room is not available, he hunts for one that is empty. Most important to Tom is “the seclusion factor,” where he can be alone and in control of his surroundings as much as possible.

Like Tom, Toni has an office in her bedroom. Although the room is small, her bed “is cocooned away and my office is separate from that, so that when I’m in the office, I’m in the office. They are just feet apart, but they are completely different spaces.” This set up provides Toni, who “can only function doing one thing at a time,” with a distraction-free
environment. Toni, however, also needs to “discuss the material to make the material emotional to me.” As school, she seeks out fellow students from class and they go to a study room at the library where they can “talk for about two hours” and help each other learn the material.

Victoria is another participant who prefers studying at home. Specifically, “the couch is the place” in her “classic 70s den” with the “cheap wood paneling” and a television usually tuned to an educational channel in the background. “Normally it’s me and the dogs” and nobody else, though if the cat “manages to venture in” she is also welcome. Victoria notes “there’s no other place outside of the couch I’ll go, but if I’m in a class, I’ll study more than I will outside of a class” which echoes somewhat the strategies of both Tim and Tom.

Zaman learns best in the classroom, where he can ask questions and seek guidance in working problems. Outside class, he will “usually study at home, because if I go there, nobody’s there to distract me. I can just close my door.” On campus, Zaman sometimes goes to the library, but if he really wants quiet, he likes “to go on top of the parking deck.”

**Constructing a Theory: The Third Dimension**

The learning spaces of students, that is the locations where they preferred to study, were where they felt “secure and comfortable.” (Chris) Like their classrooms, these spaces tend to be built environments where the students themselves had very little influence in the construction but over which their perceived level of control is much greater. In some cases, the learning space may actually be one of their classrooms, but without the instructor or other students present, the environment offered students greater agency in their own actions. While
much of the discussion about comfort revolved around physical features, it became apparent
that what participants were seeking was power over their environment.

One aspect of power a majority of the students discussed was control over the
auditory environment. For most, control meant quiet. Eight participants discussed their desire
for quiet directly, while nearly everyone in the study, even those who mentioned the desire
for background music, noted how their comfort in a learning space related directly to their
ability to control the auditory environment. In a class, that control belongs to the instructor,
to the point where some students do not even feel they have the power to silence students
around them even when “there is one person who ruins everything” in the class. (Zaman)

Participants also discussed their ability to focus as it related to the opportunities for
distraction. Having the ability to move around both physically and mentally allowed students
to take breaks that helped them to maintain focus in their studies. In a classroom the
instructor, directly and indirectly, commands the focus of the room, taking that power away
from students. A small, but ongoing struggle within classrooms, which in some cases is
explicit as Cody described his “authoritarian teachers” but is more often implicit, is the
ability of students to mentally “check out” and get away from the class, if only for a
momentary break. In a classroom with an instructor, such opportunities are limited and may
also create unwanted distractions for others which further limits students in their actions,
which must play into their sense of control, or lack of it, in a classroom.

In their learning spaces, participants all noted the distractions they allowed
themselves and built into their study spaces. A few students preferred busy places. Aysha
favored the bustle of a coffee house while Victoria and Tim wanted televisions in their spaces. Other participants, like Toni and Calvin, were too aware of their ability to distract themselves, even when they did not wish it, and so sought places that were offered fewer diversions. Regardless of busy or quiet, an important component in the construction of a learning space for each participant was the ability to allow for distractions. Along with noise and distractions, both good and bad, student descriptions of their preferred study spaces included mentions of temperature, proximity to others, and the availability of their favorite beverages and snacks. Taken as a whole, participant descriptions of the places they like to study demonstrate how important it is for students to feel the ability to control their environment.

The sense of agency participants felt in their learning spaces, however, was not total. Chris, Tom, and Victoria, all of whom studied at home, noted how they had to be away from the rest of their family in order to do schoolwork. In other words, their control of studying spaces was limited to the times when they could shut out others, which depended largely on other activities going on in the house. Aysha mentioned that her preferred location, a local coffeehouse, was the only place she could get away from her family and study, which limited her study times to the hours the coffeehouse was open and she had fulfilled her obligations at home. Tim explained that his ideal study location was at home, but with his wife and new puppy in the house, he had to get out to accomplish anything.

Agency, then, must be understood in a relative sense. The preferred study locations participants discussed did not necessarily provide them with total control of their
environment, but when compared with their classrooms, study locations offered students a greater sense of agency over their comfort and their learning. Recognizing the central difference between classrooms and learning spaces revealed that the power to construct a learning space is the power to learn. A sense of agency, even if limited, permitted students to gain a sense of power over their spaces which created a sense of comfort and well-being that promoted better learning. Is it possible for students to make their classrooms more like their learning spaces?

**Constructing the Ideal Classroom**

“*If you could build more character...*” - Bo

After establishing how they perceived their classrooms and how they constructed their learning spaces, participants were asked to consider how they would improve their classrooms. The premise of the question was not to build new classrooms with unlimited resources or to undertake extreme makeovers of their classes, but rather to work within their existing rooms using materials at hand. Not surprisingly, students offered various visions for what they would like to see in their classrooms. Some were more ambitious in their plans, while others recognized immediately the limitations they would face if they actually attempted to change their rooms and let that reality shape their responses.

In nearly every case, the first impulse students had was to put something on the walls. As noted earlier, participants all noted the blankness and blandness of the classroom décor, particularly the walls. Every student in the survey suggested the addition of posters or photographs to the walls, including two students, Jack and Cody, who specifically brought up
the “hang in there” cat poster, not because they liked it, they did not, but because they believed it was better than looking at the walls as they were. Bo and Zaman suggested maps would bring a sense of place into the room and a little bit of color for the walls. Zaman also recommended the addition of flags, particularly those of students’ home countries or states, which he believed would inspire a sense of pride in students and motivate them to perform better. Calvin thought even generic photographs, such as inspirational “shots of somebody climbing a mountain” or even “silly advertising photos of the college” would be enough to break the monotony of the classroom. Aysha and Toni even offered to come in on their own time and paint the walls.

All participants focused on seating at some point in their discussions, both in the choice of chairs and tables available and in how they should be arranged. A third of the participants favored tables to individual desks arguing that tablemates tended to bond together during a course and encourage each other’s studies. As Calvin explained, “students will unite with each other” at a table. Justin echoed this sentiment noting “it’s easier just to work with other students” while at a table. In the absence of large tables, Chris “would like to group people together” by moving desks away from rows and into clusters. Instead of tables, Aysha, Justin, and Toni all favored stepped seating they had in classroom auditoriums. Justin added that in the fixed seats in most auditoriums “people were much more likely to stay in their seat and keep the noise level down.” On the other hand, Tom spoke against auditoriums and their “subway style of sitting” and Victoria noted she knows all of the auditorium room
numbers at CPCC and checks classroom assignments to make sure she does not register for a class in an auditorium.

Seven of the participants liked desks arranged in either a U-shape or circle. Laura, who likened most of her educational experiences to being “inside the box” preferred circles because “even though you may be boxed in… it’s less of a box” when “everyone can see each other.” Regina favored circular arrangements as well, noting that how a room is set up affects the classroom dynamic. “Are we here to interact with each other, or just you [the instructor]? Rows say just you” whereas a circle indicates the class will be more of a collaboration. Tim added that in such a setup “everybody gets a say” which he felt is important for learning. Victoria suggested that sitting in circles requires students “to really be more attentive and think of how you’re sitting to be able to look at the teacher” as well as “pay attention to the other people in the class.” Not everyone liked circled desks. Justin did not favor circles because they “felt like I was too distant from the other side of the classroom” and that “communication between classmates was really reduced in that way.” Toni worried that circled desks limited her access to the instructor and any material that was on the board. Jack suggested that instead of any set formation, every classroom could have “different types of chairs stacked up in the back and you come in and pick your chair.”

Apart from walls and desks, students did not offer many suggestions about how to improve their classrooms. Chris and a couple other participants suggested “greenery of some sort.” A few students recommended taking classes off campus to make them more appealing. Instead of bringing nature into the classroom, Laura and Tom thought that bringing the
classroom into nature would be a better fit. Zaman, who spent most of his education in Afghanistan outdoors, was not too enthusiastic about taking classes outdoors. Aysha and Jack suggested nearby restaurants where food and drink would be available. “It could be in the middle of a Starbuck’s and our professor would walk in and still be able to teach class.”

(Aysha)

Distractions, or the lack of them, figured into all the discussions. Calvin advocated for built-in diversions like posters and photographs, “I kind of liken it to having a beer with dinner” where “a short break from eating something else of flavor keeps you going… The distraction actually helps you focus and refresh; keeps the brain engaged.” Chris added that having something else to look at in the room allowed him the opportunity to “look away, think about something else for a little bit, then get back into the subject, as long as it doesn’t draw me away from that subject entirely for a long period of time.”

A number of students discussed how the lack of distractions in most classrooms becomes a distraction that detracts from the class. Victoria noted that when “the only real thing to look at is up there [points at the podium], which is where the teacher’s going to be… you’re going to be distracted by something that you have” such as a phone or laptop. She admits she spends too much time distracting herself with “‘ooh, what’s that?’ moments” regularly in her classes. In Chris’s experience “with a distraction-free room, kids are going to create their own distractions.” Even though he does not bring a computer to class, Chris finds himself “watching people on their laptops in front of me.”
When considering how they might change their classrooms, students offered responses that, while varied, were also limited. In discussions, participants immediately noted how they would alter walls and desks, but required further prompting to look at other aspects of their classrooms and even then were reticent to explore other options, such as the cultural or emotional aspects of a classroom. Some, like Chris, expressed the importance of “being socially comfortable and being comfortable with your actual surroundings,” but when asked to elaborate, he and the other participants were not able to explain what that meant beyond sitting with friends. When asked how they could improve the feel of a room, students admitted, like Bo, that while they “would like the room to have a bit more character” they were not sure what that would look like. In discussing her learning strategies, Toni mentioned her “need to discuss the material to make the material emotional to me,” but admitted she only did this outside of the classroom and was not sure how to make it happen inside of one.

Regarding the physical aspects of their classrooms, none of the participants discussed moving podiums or computers at the front of their rooms, which suggests that they expect some things to remain constant in their classrooms, in particular the focus of attention to the front of the room. Nor did students discuss how they might optimize instruction in a room. Nearly every participant compared the styles and effectiveness of their instructors, but they held those qualities as essential to the instructor and not as part of the classroom.
environment. In other words, while they might change the room, those changes were assumed to have little or no effect on the instructor or instruction.

**Before students can reconstruct their classroom spaces, they must have an awareness that classrooms can be changed as well as ways that might happen.** Students need to feel they have the right to change a room, or at the least, believe they have the ability to enter into negotiations about the layout of the room with their instructors and fellow students. Entering into any negotiation requires individuals to address the many needs and perspectives of all stakeholders which includes not just the instructors and students, but also the expectations placed on them by the larger culture, all of which is manifested in the physical and social spaces of the classroom itself. Negotiating the construction of a classroom begins with acknowledging where the power lies within it as well as noting the forms and locations of resistance to change.

**Negotiating Classrooms**

*“It’s like a social contract” – Tim*

When asked why they do not initiate changes in their classrooms, participants all noted as Cody did that “I don’t feel like I have the right to change anything.” Nearly every participant recognized that their instructors held most, if not all, of the power in a classroom. Some went beyond the classroom to the institution and a couple even went further and noted that ultimate control of the classroom belonged to the government. Whoever they identified as possessing power, all participants agreed with Victoria’s assessment that “it’s not me.” Despite their limited control over the classroom, participants all recognized they possessed
some agency as students. Cody, Bo, and Toni even pointed out that as taxpayers they have
rights to the classroom as it is public property. The question arises then, what prevents
students from exercising even limited control in their classrooms? Even when given
permission to alter a room, participants noted their reluctance to do so.

Students locate themselves in a classroom through their choice of seat. Victoria noted
“the most control a student, someone who’s taking the class will exercise is making
themselves more comfortable in the space is where they’re going to sit.” Tom agreed that
“you get control of one thing that’s very important to you… it gives us more power.” Once
students get established in their space, it becomes a place of comfort as well as a position
with which to negotiate for power with fellow students and the instructor. Moving out of that
space requires students to leave their comfort zone and move into the larger room where they
do not feel in control. Calvin remarked how “people get established in their space and they
develop a sense of comfort, but also how they can not be engaged,” what he terms a “blinder
situation” where it becomes “socially awkward” to move outside one’s own seat. This may
explain a large part of the resistance students feel as they leave their place. The classroom
beyond the student’s own desk represents a social battleground where what little power they
possess is contested not just by the instructor, but by other students and the room itself.
Staying in their seats is safe whereas moving beyond them risks ridicule and sanction. As
Regina noted earlier, both instructors and students “would think that a student has lost their
mind if they came in and started rearranging the room.”
Chris expressed a sentiment shared by other participants that “school is not where I like to learn, it’s not; I like to feel secure and comfortable.” Classrooms as learning spaces are limited by the fact that much of the room feels off limits to students or, as Aysha described some of her least favorite classrooms, “something that’s cold and bitter.” Away from their space “the air just feels different because you feel the eyes looking at you.” (Cody) While studying in their learning spaces, students described a sense of control. Even in public spaces, where they do not exercise control over the room, students have the freedom to move and adjust their environment, freedom that is lost in the classroom. While they may not be aware of it, learning becomes secondary to their primary goal of securing their comfort.

Even secure in their seats, students are on guard. In situations where individuals do not feel they have access to power, they seek to create distance between themselves and sources of power (Foucault, 1973). For students, that means distancing themselves from instructors and other students. One way to create distance and resist the power in the classroom is to “hide in the herd.” (Victoria). Cody explained that in a class he can either engage or “halfway listen, I think it’s properly my choice.” Jack also asked whether instructors “deserve my attention” and that “what it boils down to is am I willing to listen?” Victoria admitted in classes “half the time you’re not really paying much attention.” Looking around her rooms she sees “phone, phone, phone, sleep, sleep, phone, sleep, phone, sleep.” Chris described classes with “everybody on Facebook,” while Aysha often witnessed “students in the back of the room on their cell phones or computers” and nobody paying attention to the instructor.
The same distance is true for relationships between most students. Regina described her classes as “very formal, we’re not intended to interact with each other. We’re here just do the class, eyes forward.” Even when the instructor leaves, she found “we never turn around and talk to each other.” Tim was clear that he was “not really here to make friends.” In Bo’s classes “nobody says anything, they all just sit there quietly.” By not paying attention to other people in the classroom, students are able to resist the power in the classroom, but it is a passive resistance. Creating distance from the power in the classroom may allow students to maintain their own sense of comfort, but it moves them further away from the ability to negotiate for power.

Gaining access to the rest of the room might make classes feel less contested and more accessible, but who would give students that right? Chris suggests “maybe that power has to be released somehow by the instructor” a sentiment shared by all the other participants. Yet even with permission from instructors, students might not feel the power to do anything. Jack explained “it could be my classroom, but would I want the classroom?” Victoria and Laura described their attitude as “more of a sense of apathy” or “a sort of inertia” both of which reflect the passive nature often adopted by students in their classrooms. For their part, instructors generally “have a certain way they like things” which reinforces the distance between students and teachers. (Aysha) Chris recognized that “part of their [instructors’] comfort is keeping that wall up” which prevents them, like their students from interacting. Bo observed that a number of his instructors kept the rooms dark which he interpreted as a deliberate effort to keep students passive and limit interactions.
Most of the participants expressed their reluctance to altering their classrooms as fear of sanctions from their peers. Even something as basic as moving a desk might draw unwanted attention from other students leading Laura to ask “if no one else is doing this, why would I bother?” Even worse, she noted would be “people being like, ‘why is she even doing this right now?’” (Laura) Tom suggested that as students “we don’t like change” and resist any efforts to alter their rooms. Although none of the participants indicated they discouraged other students from making changes to their classrooms, they all noted how they felt the “eyes of others” on them whenever they might try. (Cody) Chris worried that “some people are just afraid of letting their classmates down with moving desks.” Laura noted she knew “lots of people feeling uncomfortable even standing up to go to the trash” which leads to the reality that “people won’t do things even if they have the option to.” (Tom)

Resistance to change also comes from the larger culture which is embedded within the classroom. “Society trains you” how to behave and entering the classroom sets years of training in motion. (Cody) Regina observed that “we know what’s expected” and that the “structure of the room dictates what’s going to happen. Why would we think this is our space when from day one, we’ve always been, what’s been instilled in us, beat into us literally, because when we don’t conform, we get in trouble.” Some of the rules are officially established in college documents and syllabi, but participants recognize their behavior is not a product of explicit rules, but of “the general sense that we don’t have the right to do it. Growing up, it’s always like this.” (Tim) Victoria explained “you walk into a classroom, instant like, you go into student mode. It’s what they train you to do for years and years and
years… you sit down and shut up. To go against that, you’re kind of fighting against all that training you’ve had all your life. You’d have to really, there’s a lot of resistance to that.”

Resistance to change indicates how much students and instructors expect our classrooms to be classrooms.

**Constructing a Theory: The Fifth Dimension**

Despite the existence of college rules and syllabi that serve as explicit contracts regarding student behavior, the negotiations that occur within classrooms are most often tacit arrangements. **Students and instructors enter their classes with an implicit understanding of how they will act and interact without even acknowledging such an agreement exists.** “Years of school indoctrination” have led to sets of expectations that limit behavior for both instructors and students. (Victoria) As many of the participants recognized, these negotiations extend back to their earliest classroom experiences. Their actions in their current classrooms represents an acceptance of the terms of a “social contract” governing classroom behavior. (Tim)

If negotiations for a classroom are made explicit, students understand that the alignment of power favors the instructor. It is possible, however, for students to establish some control over a classroom. As Tom recognized, “there is a balance of power there… it’s not so democratic that everyone owns it, but it kind of is. At the end of the day it’s the teacher’s overall rule, because the teacher decides who passes, who fails. So everyone should do what they can to appease the teacher, but without students, the teacher doesn’t have anything.” Cody elaborated that “teachers don’t really have a right to the classroom either,
because it’s not theirs.” Cody did go on to note, however, that “if teachers made the rooms more comfortable towards themselves, that the students would feel more comfortable as a whole.” This may be the key.

Students see that the power in a classroom runs through their instructor, but that power actually comes from outside the classroom. Resistance to changes in the classroom, however, come from within it. Students may perceive they are in an adversarial relationship with instructors and even other students, but these perceptions are unspoken and often unconscious and reflect experiences that occurred long before they entered their current classroom. Awareness of the dynamics of power and resistance within the classroom may allow students to see the entire classroom, not just their seats, as theirs and so develop a deeper investment in all that transpires within it. Instead of occupying individual islands within a larger room, the room itself becomes their learning space. Towards the end of our interview, Toni mused that in the end it might be possible “to have the discussion with the other students in the room and each person had some input with the instructor and said ‘what would you do in this room to make it the ideal classroom?’ That would be an interesting challenge.”

**A Grounded Theory of Classroom Spaces**

“A creative space makes a good learning space.” – Chris

Grounded theory works closely with the data to develop statements that guide the researcher in the development of a theory. The theory becomes grounded in that theoretical statements remain close to the data collected. Instead of seeking large, generalizable
statements, grounded theory offers middle-range theories that while more modest in scope, remain rooted in the words and thoughts of research participants. In this study, theoretical statements emerged from participant discussions of their classrooms. Guiding questions and statements are summarized from each of the previous sections in the following table:

**Table 4.4: Summary of Theoretical Statements**

<table>
<thead>
<tr>
<th>Category Question</th>
<th>Theoretical Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>How would you describe your classrooms?</td>
<td>Classrooms are made for classes, not for students.</td>
</tr>
<tr>
<td>What makes a classroom a classroom?</td>
<td>Entering a classroom, instructors and students occupy roles that have been culturally established and embedded within the place itself.</td>
</tr>
<tr>
<td>How would you describe your learning spaces and how does it compare to your classrooms?</td>
<td>The power to construct a learning space is the power to learn.</td>
</tr>
<tr>
<td>What might you do to make your classrooms more like your learning spaces?</td>
<td>Before students can reconstruct their classroom spaces, they must have an awareness that classrooms can be changed as well as ways that might happen.</td>
</tr>
<tr>
<td>What prevents you from changing your classrooms?</td>
<td>Students and instructors enter their classes with an implicit understanding of how they will act and interact without even acknowledging such an agreement exists.</td>
</tr>
</tbody>
</table>

Not surprisingly, discussions that focus on classrooms and the dynamics of power within them lead to a number of overlapping statements. Participants have long been aware
that their power as students was limited and that in a classroom their instructor is the ultimate representative of authority in the room. Asked to consider their classrooms in relation to the places where they study, students were able to use concrete comparisons (where they have class vs. where they learn) to develop abstract understanding about the nature of their relationships with their instructors, other students, and the classrooms where they all come together.

Examined individually, theoretical statements that emerge from participant responses demonstrate how students are both aware and not aware of the power they have within classrooms. As questions and responses developed, participants were able to uncover how their experiences as students reflect years of sitting in classrooms and learning and living the expectations, some spoken, most not, that parents, friends, fellow students, teachers, classes, and schools all had for them. In some cases, these discussion led to exclamations. Regina’s “we’ve been brainwashed!” was a common theme for these interviews. Other participants seemed to evince little shock, instead offering more resigned or even cynical responses like Cody’s recognition that the power of students is part of a long-standing “legitimacy of us not having power over our surroundings… in high school, and like elementary and middle school, it was always the teacher’s room.”

No matter their approach, students located the control of classrooms as outside of themselves. They had their desk, beyond that was out of reach to them. Participant perspectives of power shifted when discussing their study spaces. When learning, students sought places where they had power. Even in public locations where their power was limited,
participants indicated the desire for an independence of movement and freedom of thought, what Chris and others referred to as the “right to be distracted.”

When asked how they could bring some of the power they had in their study spaces into their classrooms, participants manifested the same restraint they described when they discussed sitting in their classrooms. That is, even though they were not in a classroom, the dynamics of the classroom still influenced their responses. None of the participants offered radical changes to their classrooms. Granted, the question was framed so that students had to consider only changes that could occur within the existing physical environment of their classrooms, but none of the students proposed moving instructors or their podiums. Instructors and their power remained out of reach and, for the most part, the power of the classroom also remained intact and beyond student control. With a couple exceptions, the extent of student suggestions to change their classrooms did not move beyond placing things on walls or moving chairs. Even modest suggestions were offered with caveats that bowed to the power of instructors who were not present but whom students knew would react to any change by insisting that students “change it back.” (Tim) If it was not their instructors, it was other students who prevented participants from altering their classrooms.

Whether from instructors or students, the resistance participants described had more to do with their perceptions than actual experiences or as Chris offered, “I think people would just be afraid to ask what other people want.” That is, students surrendered their autonomy to the classroom without questioning or even acknowledging that it had happened. When asked to consider their lack of power in a classroom, students recognized that they had
been indoctrinated, but no one suggested their training could be undone or that they had power to remake the relationships in their classrooms. Similar to other aspects of our cultural lives, explicit actions have been built on implicit understandings that have often gone unchallenged.

Grounded theory is ultimately about action. The conceptual model is designed with implementation in mind. In this case, the model developed envisions classrooms where students and instructors together can culturally construct classrooms that are also learning spaces, a place like the one Calvin envisioned where “we’re more part of a community as opposed to on your own in the middle of all these people.” Classrooms are negotiated spaces where the terms of usage have already been established before students or instructors have even entered the room. In order for negotiations to occur within classrooms over their usage, students must recognize that such discussions can occur.

How would negotiations emerge in a classroom? Although somewhat adversarial Tom suggested that “nobody has to take ownership… both sides can assess how the classroom’s going to be.” If and when students perceive that the classroom is not comprised of two sides, but is a room with a common purpose among many individuals, negotiations can occur explicitly and power can be acknowledged and shared. Zaman offered the hope and promise of such work by noting “it’s good to change sometimes.”

Summary

The penultimate chapter of this study focused on responses offered by participants to questions regarding their classrooms and study spaces and perceptions of themselves in both.
Comparing the two places, students noted that the power they felt in their study spaces was not available to them in their classrooms. When asked to explain why this was, students pointed to the power of their instructors over classrooms and how they were limited by it. Participants also recognized cultural limits on their behavior in classrooms, most frequently identified in the sanctions, real or perceived, from other students.

Grounding a theory from student responses led to a series of statements that identified participant perceptions of power, its sources and limitations. The theory that emerged acknowledges that student perceptions are for the most part implicit and often unexamined and ends with the premise and promise that uncovering assumptions about classroom dynamics can lead to discussions and improvements.
CHAPTER 5: DISCUSSION AND CONCLUSIONS

The final chapter brings considerations of the nature of student perceptions of classrooms and learning spaces to a close. First is a brief summary of the previous chapter. Next, a brief discussion of the unique nature of community college students is presented. Then theoretical statements from the previous chapter are drawn together to form conclusions which relate the findings to the literature discussed in Chapter 2. The third section considers implications of this study for potential applications and research. Finally reflections are offered about limitations and missed opportunities that may provide a starting point for future studies on students and their classrooms.

Summary of the Study

In a qualitative study, fourteen students of Central Piedmont Community College in Charlotte, North Carolina were asked to share their perspectives on classrooms. In hour long interviews, participants were asked to compare the rooms where they attended classes and the places where they preferred to study and learn the material presented in their classrooms. Students revealed they learned best in places where they felt they had some power over their surroundings, in other words, not their classrooms. When asked why they did not attempt to use their personal power to change classrooms, participants pointed primarily at their instructors, who participants all recognized as the ultimate authorities in their classrooms. When asked to imagine they had the instructor’s permission to alter their classrooms, participants remained hesitant to do much for fear of incurring sanctions from their fellow students, demonstrating the cultural power of their classrooms to limit their behavior.
Analysis of the interviews focused on revealing the lines of power in classrooms and locating resistance to changes as well as searching where opportunities for changes in classrooms might reside.

**The Community College Student**

Community colleges and their students have long been considered non-traditional when compared to universities and their students (Cohen & Brawer, 2003). Whereas four-year institutions are competitive and select their students based on merit, community colleges are open-door institutions admitting all comers without regard to their academic profiles. Unlike more traditional universities whose student populations tend towards homogeneity, especially with regards to their academic experiences, community college students represent a broad spectrum of society with a wide range not only in academic abilities but also large differences in age, gender, ethnicity, social and economic status, and life goals (Levin, Cox, Cerven, & Haberler, 2010). Compared with their counterparts in four-year institutions, community college students are both older and less experienced in the ways of higher education. These factors all contribute to the uniqueness of community college voices when compared to students from more traditional educational environments.

According to the most recent data from the American Association of Community Colleges (2016), the average age of a community college student is 28 years. The average age of students at Central Piedmont Community College is 29 which is in line with the national average. As adults, these students enter their classrooms with goals and challenges far different from 18 year-olds who enroll in four-year schools immediately following high
school (Malcolm, 2012; Levin, Montero-Hernandez, 2009). Compton, Cox, and Laanan (2006) found that compared to more traditional students, community college attendees are more likely to be “pursuing a program leading to a vocational certificate or degree” which figured prominently in their choice of academic paths (p. 74). Many of these students consider themselves primarily as workers and family members than as students and bring a different set of priorities into their studies than traditional students (Compton, et al., 2006) a fact to which the participants of this study could all attest.

Many students entering community colleges are the first in their families to attend college (Malcolm, 2012; Levin, Montero-Hernandez, 2009). According to data from the National Center for Education Statistics (2015), 45% of the individuals enrolled at community colleges could be considered first-generation students, which means that although they are older than traditional students, they have less experience in the ways of higher education (Wirt, 2010). In this study, four of the fourteen participants, or 28.5%, were the first in their family to attend college, while 3 of the participants mentioned they were only the second member of their family to do so. Compared with students at four-year schools, first-generation community college students have taken fewer college preparatory courses in high school and require more developmental courses when they enter college (Levin, Montero-Hernandez, 2009). Taking developmental courses increases the course load for first-generation students and extends the time needed to achieve academic goals, all of which contributes to the low retention rates found among these students (CPCC, 2015).
Community college students are also more likely to have had negative prior learning experiences, especially those from lower income groups (Levin, Montero-Hernandez, 2009). Eight of the participants in this research discussed difficulties in their early academic careers, primarily in high school. Given the challenges they face even getting into a classroom, it is not surprising to find that some students at two year colleges indicate feeling like “imposters” in academic settings and described the college environment as “hostile, discriminatory, or nonresponsive” to their needs (Kasworm, 2005, p. 5; O’Donnell & Tobbell, 2007). The unique circumstances of community college students underscores the importance of hearing their voices and listening to them where they are, particularly in their classrooms.

**Conclusions**

Analysis and evaluation of student responses enabled the development of a grounded theory that highlights the possibility for negotiations within classrooms regarding their use, but acknowledged the obstacles that prevent such conversations from happening. The power dynamics within classrooms encompass not only the dynamic between instructors and students, but includes considerable cultural influences that reach into the past and present of student educational experiences. As the Marxist thinker Henri Lefebvre (2003) noted, the first step in understanding how space operates is to acknowledge its presence, particularly the power within it.

In this study, classrooms were examined not so much as physical spaces, but as cultural locations. Flowing from the three research questions, two conclusions relate students and their perceptions of classrooms to the limited empirical literature that exists and then ties
it all into larger theoretical understandings of how individuals and the places they inhabit shape one another. The second research question emerges as the central point of discussion and figures into both conclusions as the concept of agency, both in classrooms and learning spaces takes center stage. Of particular interest is how the interaction between the individual and the larger culture plays out in the context of the student and the material culture of the classroom and how these relationships might promote spatial praxis, where students and instructors reveal the inequalities built into classrooms and develop new relationships that promote equality (Elden, 2004; Lefebvre, 1991).

Conclusion 1: The power of the classroom is cultural.

The first conclusion emerges from the first two research questions which ask how community college students construct their classroom spaces and how those spaces relate to the locations where they like to study. What emerges in student discussions is their sense of agency in study locations which is not found in their classrooms. What happens to students’ sense of power when they enter a classroom? Research has examined power and its role in classrooms, but no studies specifically examine how that power embeds itself within the material culture of the classroom. Temple (2014) discusses Lefebvre’s notions of space and the physical context of universities, but his work is theoretical and offers no empirical work to support his supposition. Panofsky and Bogad (2011) come closest to this research in their study of students’ silence in their classrooms. Like this study, they employ Hall’s notions of proxemics and Bourdieu’s concept of *habitus* to understand how and why students feel constrained in their classes. In the end, however, Panofsky and Bogad’s work is primarily a
reflection of the researchers own biases and how they affect their interactions with students. Their work does not examine the role the classroom plays in student perceptions or attitudes. This discussion of power in classrooms, then, does not come from a single vein of research but comes from a variety of sources that look at power both outside and inside the classroom.

A number of studies consider how power outside classrooms affects students inside of them. Wilson (2001) examines the placement of a continuing education project and wends his way through critical and postmodern theories dealing with power and space and how they affect the participants of the workshop. Although not specifically interested in classrooms or students, Pellow (1992) discusses how the power of landlords, often absentee, affects relationships throughout the structures within a Nigerian village, including schools. McConaghy (2006) examines a similar dichotomy in her study of rural Australian schools that have to contend with urban supervisors, which leaves teachers and their students somewhat out of place. Edwards and Usher (2008), together and with others (Edwards, Cervero, Clarke, Morgan-Klein, Usher, & Wilson, 2002), develop social cartographies that place learning within larger social and political realities. The work of researchers like Wilson, Pellow, and others place classrooms within a broader social and economic context and demonstrate how lines of power run through schools affecting education, educators, and the educated. Students and their learning are part of a larger political conflict where “education” and “learning” are contested issues. Classrooms are at the center of the debate, but as Wilson (2000) argues students in them are either unaware, unconcerned, or feel marginalized in the debate over their learning. Although not specifically asked about larger
policy decisions and political arrangements, participants in this study display a similar disconnection between their classrooms and the larger political battles over education, which supports Lefebvre’s (1991) contention that spaces like classrooms promote an “illusion of transparency” where power remains invisible to those inhabiting a space (p. 26).

Looking outside classrooms allows researchers to consider the larger forces at work in all education, unfortunately in such studies, classrooms and the people using them are too small of a unit for analysis and the interactions of students, instructors, and their classroom spaces are only discussed in relation to the larger geopolitical forces around them. Power inside the classroom itself is the focus of studies that examine power dynamics from a number of perspectives. Within this literature a couple of tracks can be discerned. One approach examines the design and organization of classroom spaces and their effect on learning. The other track considers student perceptions of their comfort and how they relate to learning.

Studies that focus on design support the relationship between the physical environment and learning. Much of the research examines schools on the scale of buildings and their design, arguing for closer collaboration between educators and architects (Hand, 2014; Wood, Warwick, & Cox, 2012; Butz, 2002; Dittoe, 2002, Devlin, Donovan, Nicolov, Nold, & Zandan, 2008). On a smaller and more personal level that reflects the scale of this research, Strange and Banning (2001) analyze classroom design, noting that the power in the classroom is manifest in its structure and the types of furniture and its placement. They argue that more open designs foster accessibility and improve learning. Jessop, Gubby, and Smith
(2012) also support “teaching spaces which break with the mould, imply new possibilities, and have the capacity to bring about shifts reflective of more participatory, socially constructed and engaging pedagogies (p. 200). Chism (2002) also challenges traditional classroom design, supporting Strange and Banning’s assertion that adaptable classrooms are more effective. Tom, Voss, & Sheetz, (2008) also study floor plans and seating arrangements concluding that open arrangements promote student learning as measured through overall performance. Although studies such as these address the influence of the physical environment on learning, they do not consider how the spaces themselves represent the power of the culture outside of the classroom. Nor do any of these studies approach the idea of classrooms from the student perspective. The only examples found in the literature involve the use of quantitative surveys (McLaughlin & Faulkner, 2012; Turpen, Finkelstein, & Pollock, 2009). While useful, surveys employing a Likert scale do not allow student voices to be heard.

Although comfort may be expressed physically, research that studies student perceptions of comfort focus on primarily on social aspects of well-being and security (Harmening & Jacob, 2015). Two disciplines within psychology in particular, environmental psychology and community psychology, stress the relationship between the environment and behavior in many settings (Wood, Warwick, & Cox, 2012; Bonnes & Bonaiuto, 2002; Peponis & Wineman, 2002; Veitch & Arkkelin, 1995). Nielsen and Moos (1978) use psychological assessments to establish what they term exploration climates in high schools. They find that students who are more comfortable in their social environment express greater
satisfaction with their classes. Harmening and Jacob (2015) asked first-year college students at a Midwestern university how they felt about their campus and found student well-being an important component to student success, though their study focused on the overall campus climate and did not discuss the classroom environment. Ruus, Veisson, Leino, Ots, Pallas, Sarv, and Veisson (2007) survey Estonian high schoolers and conclude, like Quinn et al., that positive social climates improve student success. Quinn, Poirier, Faller, Gable, and Tonelson (2006) seek links between social climate and student success. They find that social environments that promote respect and fairness among teachers and students promote better learning. The authors also lament the general lack of empirical studies of classroom environments, a sentiment shared by this author.

Although these studies are more concerned with the social environment, they do indicate that students learn better in rooms where they feel comfortable, a conclusion this research supports. Comparisons with the literature, however, are limited in that none of these studies consider the material culture of the classroom as it is perceived by students. Although students figure into discussions of power in classrooms, their voices are not heard, instead the focus is either on the larger political forces at work or on how it is designers can better locate desks or improve lighting. In this study, students’ voices were placed in the foreground. Analysis of student responses moved beyond their words to the context behind them, but the theoretical model remained in the classroom with the students. Specifically, the findings reveal that classrooms are made for classes, not for students and that entering a classroom, instructors and students occupy roles that have been culturally established and embedded
within the place itself. Students in their classrooms behave and think within a cultural context they have been a part of all their lives. Students have so deeply assumed the cultural models of classrooms that they construct classrooms even when they are not in class.

Understanding the nature of how a culture manifests itself within a location relates directly to Pierre Bourdieu’s (1984) concept of *habitus*, a physical environment into which cultural norms and customs have become embedded. In this case, we have created classrooms for the intent of being classrooms. Desks, whiteboards, podiums, clocks, carpeting, windows and window treatments, etc. have all been selected and installed with the specific purpose of being part of a classroom. We then build schools to house these rooms. All of these pieces reflect our social expectations for what a classroom should be. When students enter a classroom, those expectations are there waiting for them. Students also bring their own expectations with them, some of which they are aware, others are unconscious.

In their discussions of classrooms, participants describe how their classrooms perpetuate norms they have known all of their lives. For Bourdieu (2003), a classroom represents a field, a structure that inscribes itself within a culturally constructed reality that students occupy. Using any culturally constructed space, the values and behaviors of that place are internalized and converted into a disposition that generates meaningful practices and meaning-giving perceptions. In this way a classroom becomes a classroom because students see it as a classroom and in the process they assume the identity of students in both thoughts and action. Participants in this study describe how when they enter a classroom, even if it is the first time in that room, they know where to go and how to behave.
Students do not surrender their agency, but in entering a classroom they subscribe to long-standing cultural assumptions about classrooms and conform to expectations and limits on their behavior. In their study locations, participants note how they are in control of their space and can adapt their environment to their own specifications. By taking control of their space, they take control of their learning. In their classrooms, students in this study discuss how they are not in control of their environment. They do not feel free to adjust the lighting, sound, or move desks around. They are not in control of the classroom and are not in full control of their learning. For that, they need to step outside of the classroom and find their own space. Geoff Dyer’s (2015) concept of non-places fits well with the institutional setting of many community college spaces. Dyer noted that with cell phones and laptops, “people are present physically but are conversationally and psychically elsewhere: the non-place is now inhabited by the non-present” (p. 41). A number of students in this study note how they and their colleagues are often busy with laptops and smart phones before and sometimes during a class, while their instructors are engaged with computers at their podiums. To care about their rooms, students have to be present in them, but engaged as they are with technology, the room around them becomes a non-place, a location for their body, while their mind is elsewhere. Engagement with technology has become a part of our material culture, particularly in public places like airports, restaurants, and schools. Students enter a classroom and immediately check in with their devices and check out of the room. This passivity reinforces the lack of agency.
Conclusion 2: Changing the culture of the room, changes the room itself.

The second conclusion concerns how students might exercise more control over their classrooms. The second research question remains important to the discussion, but is now considered in conjunction with the third research question which asks what strategies and methods would allow community college students to make classrooms into learning spaces. As noted above, the research demonstrates a general dissatisfaction among students and faculty with the structure of their classrooms, a finding the participants in this study readily confirm. Remedies found in the literature tend toward addressing the physical structure of classrooms, working from the premise that changing the physical nature of the room will lead to changes in the learning environment (Wood, Warwick, & Cox, 2012; Tom, Voss, & Sheetz, 2008; Chism, 2002). Participants in this study, however, cast doubt on this finding, demonstrating resistance and skepticism in the face of alternative classroom arrangements.

Resistance to change, a common theme among participants in this study, is also found in the literature (McConaghy, 2006; Nielson & Moos, 1978; Tom, Voss, & Sheetz, 2008). Chism (2002) discusses how instructors who were asked to teach in rooms with new configurations would often do their best to shape the room back into more traditional set ups. Memmot and Long (2002) demonstrate that instructors maintain the status quo of classroom use and that students are reluctant to challenge it. Moos (2002) attributes the resistance students find in classrooms to a general sense of alienation brought about by the structure of schools and rooms.
Returning to Bourdieu’s concept of the *habitus*, the resistance students experience comes from a number of sources, from their instructors, from fellow students, and from habit, but the primary locus of resistance is the classroom itself. McConaghy (2006) argues that students cede their power to classrooms, something participants in this study demonstrated. A little more ominously, Setha Low (2003) notes “the production and reproduction of hegemonic schemes require the monopolization of public spaces in order to dominate memories” (p. 22). As public places, classrooms both by design and by accident have been used to teach and reinforce certain ethics and ideologies.

Structures, however, can be repurposed. Foucault (1973; 1984) emphasizes in all his work that while power may be built into places, in the end, places do not have power over us. In her study of McDonald’s in China, Yan (2013) applies Foucault’s model and reveals that “space functions only as a context, not a determinant, of social interactions and the space itself in some way is also socially constructed” (p. 454). The physical space of a classroom may manifest power, but of itself a classroom is not powerful. The understanding of the power in any location comes through negotiations among the users of that location (Foucault, 1984). In this study, participants are asked to consider such negotiations. While skeptical and aware of the many restrictions to dialogues about power in their classrooms, most of the students were open to the possibility.

Harmening and Jacob (2015), Jessop, Gubby, and Smith (2012), Chism (2002), Strange and Banning (2002), Dittoe (2002) and others cited above promote the idea that structural changes in a classroom lead to changes in student behavior that can be seen in
improved performance (Tom, Voss, & Sheetz, 2008; Turpen, Finkelstein, & Pollock, 2009).
The contention here is that the opposite is true. Changing the physical arrangement of a
classroom may provide greater opportunities for learning, but unless the instructors and
students are ready to change, it will not happen. More important is for instructors and
students to address the material culture of their classrooms. If students can extend their space
in a classroom from their desks to the entire room, they may also expand their agency and so
become more engaged learners, all without necessarily moving any furniture.

Cervero and Wilson (2001) warn against “romancing” students with ideas of
empowerment that promise much, but deliver little beyond impressive terminology. Active-
learning strategies and outcome based initiatives often have more to do with political
posturing and instead of empowering students actually reinforce “the existing relations of
power in the organizational or social setting” (p. 6) Aside from the fact that much of this
rhetoric has yet to be demonstrated as accomplishing its goals, it does a disservice to the
people in classrooms, both instructors and students who are engaged in a curriculum that was
created for them but not with them. This study is about seeing where students actually are in
their classrooms and looking at what possibilities exist for improvement, not necessarily in
measurable outcomes, but rather helping students identify power within their classrooms and
find some for themselves.

**Implications and Recommendations for Research**

Research that tries to understand the material culture of classrooms and how students
interact with those spaces are few, particularly those that address the concept of the
classroom itself as a holder of culture. This study represents a brief and initial foray into the discussion and hopefully marks an avenue for future exploration in the relationship between students and the material culture of their classrooms. Although a number of the studies discussed previously consider the behavior and attitudes of students in their classrooms, the voices of the students themselves are not present and the research does not explore why instructors or students act as they do or what they experience while in their classrooms.

Incorporating student voices is a necessary and useful next step in the study of classroom usage and effectiveness. The few studies that do allow students to discuss their feeling towards their classrooms give little room for their voices. As noted above, Panofsky and Bogad (2011) study the silence of their students in classrooms. Their study, however, is more concerned with the researchers’ positions of privilege and how they affect student participation. The voice of only one student emerges in their work and that is in response to a dialogue that arose with one of the researchers during a class. In other words, students remain silent on why they are silent. Turpen, Finkelstein, and Pollock (2009) got closer to student voices when they asked students how they felt about a math classroom, but responses were collected using surveys with a Likert scale.

Researchers who study classrooms and their effect on learning have explored all aspects of student behavior and success in classrooms and some even talk to students, but in the literature it seems that students are best studied and not heard. While a Likert scale offers participants the opportunity to weigh in on issues, the prompts are limited as are the possible responses (Turpen, Finkelstein, & Pollock, 2009). Long-form reflections, spontaneous
observations, and even rambling non-sequiturs are left out. In this study, participants were encouraged in their musings and as a result offered a number of valuable insights about classrooms. Combining student voices with existing research can deepen our understanding of what happens in classrooms.

One opportunity lost in this study, but hopefully found in future research might be to ask students how it is they regain their agency at the end of class. Despite the limited sense of agency they feel in class, when the end of class approaches, students open negotiations for power in the classroom and start to assert their independence, mainly in the form of packing up books and assembling their belongings. Instructors are required participate in the negotiations by either noting there is still time left in class or by tacitly allowing students to continue their packing up process. An intriguing question that would promote student reflections on agency and their classrooms would be to ask them what happens at the moment they start packing and how and why it is they are able to assert their power at that time but not before.

**Implications and Recommendations for Methodology**

A missed opportunity in this research that might benefit future studies is the more effective use of Photo Voice methods. Participants in this study were somewhat remiss in taking photos. Although one of the primary purposes of the pre-interview meeting was to request participants to photograph their classrooms and study locations, only half managed to do so. Of the seven who did bring photographs, only two of them sent copies of their photos. Follow-up requests for photographs were met with polite indifference and, given the low
response rate, photographs do not appear in this study. Despite the limited use of Photo Voice, it demonstrated its effectiveness in interviews. Participants who had photographs were eager to share their phones in their descriptions of their spaces and were able to discuss features and perceptions that otherwise would have gone unmentioned.

Researchers who plan to use Photo Voice should take into account the peripatetic nature of community college students. Participants in this study and other researchers note that for many community college students work and/or families come first (Compton, Cox, & Laanan, 2006). Many of the participants in this study relate how they are only on campus for their classes and do not have the time to take photos. A few students explained that they did not wish to take photos of classrooms with students in them and were not able to find a time when their classrooms were empty.

Future users of Photo Voice should aim to facilitate the process of taking pictures for community college students. Although most community college students, and all the participants in this study, possess phones equipped with cameras, providing participants with a camera might add more focus to the project. A number of participants in this study mentioned how they forgot to take photos. Carrying around a camera might provide a ready reminder and incentive to take photographs. It would also eliminate the researcher’s reliance on participants to email photographs. Scheduling an additional day and time for participants to take photographs, perhaps just prior to the interview might also help clear obstacles. In particular, the researcher may provide access to rooms students may feel unable to enter to take photographs. In the process of taking photographs, it might be possible for researchers to
conduct walk-along interviews, engaging participants in discussions of their classrooms as they wander through them (Evans, 2011). Walk-around interviews raise their own challenges, including mobility issues for some participants, which a researcher must be ready and able to address, but the opportunities for rich data collection may outweigh any concerns.

A final method for researchers to consider would be photo elicitation (Clark-Ibáñez, 2004). Similar to Photo Voice, elicitation asks participants to use photographs provided by the interviewer. Students who somehow managed to arrive at the interview without taking photographs would still be able to participate in photographic assessments. Photo elicitation might also be employed in conjunction with Photo Voice methods, allowing the interviewer to ask participants to compare their photographs with those provided by the interviewer, which might be selected to promote contrast and provoke greater discussion.

**Implications and Recommendations for Practice**

We all create and are created by culture, but much of the culture that exists in and around us goes unnoticed. We have assumed many of the beliefs, customs, traditions, and attitudes so deeply as to not even recognize they are assumptions. An important aspect of any education is to reveal and challenge those assumptions, not necessarily to dismiss them, but to acknowledge their existence and evaluate their meaning and value. This study is an attempt to uncover the assumptions built into our classrooms and examine how they operate and consider how conditions might be altered to improve the lives and learning of students and instructors.
This research is not about changing what we teach or even how we teach, but rather about involving students more in the process. Years of conditioning have made students passive and to see classrooms as places where they are constrained. For their part, instructors are also conditioned to act in certain ways and to express expectations for student behaviors as well. All of these assumptions are embedded in our classrooms. It is possible to expose these assumptions without altering the business of teaching.

As students in this study observe, instructors hold considerable power in classrooms and this process must begin with them. It is entirely possible that students could lead the change of classroom environments, but it is unlikely that a group of students would be able to work together to negotiate for that power. In fact, it is asking quite a lot for students to overcome the resistance of their culture, the room, their fellow students, and the instructor to lead any negotiations about classrooms. Instructors, then, must initiate the dialogue. Discussions about classrooms do not need to operate outside course material but could easily fit into nearly any curriculum. Once introduced, students could participate and engage with the instructor and each other the nature of the classroom. Even if students do not participate actively, they will recognize the opening of a dialogue which instructors can then use to facilitate questions not only about the classroom but the materials and the learning to take place. Instead of content belonging to the instructor, it is now shared with students who become stakeholders in their own room and learning.

Instructors may fear giving away too much of the classroom and for some disciplines, giving too much power to students might not be feasible, but giving students power does not
necessarily mean instructors lose their power. Power may be shared without anyone losing it and if managed correctly, power is not a zero sum game. An old Buddhist parable suggests the opposite: if you want to herd an ox, give him an entire field to graze in. In classrooms, instead of constraining students to maintain control of the classroom, instructors may find that by opening up the room, students become more attentive to what is being taught. As masters of content as well as evaluators of performance, instructors will always be vital to the process of learning. Instructors are in classrooms to facilitate learning and help students analyze and evaluate concepts and materials. A part of that process can be assisting students in taking possession of their classrooms. Participants in this study describe their uncertainty and reluctance to take control of their classrooms. Instructors can model the process and so extend learning from the podium to the entire room.

Enabling and empowering students is not about letting students take over classrooms, but is about helping students expand their agency from their desks to the classroom at large. If students take possession of the classroom, they also take greater control of their learning and move from passive to active agents in the process of knowledge. By locating their ideas in the physical space of the classroom, students would begin to locate their learning within the same room. This can be as simple as asking students to provide content to add to the walls. The structure of the room is not altered, but the cultural environment is changed as is the *habitus*. One of the more reflective participants in this study, Tom, notes that student attitudes in class center on the instructor’s power over grading. In her book about teaching and writing, Natalie Goldberg (1986) discusses classes where she took away grades to open
up her classrooms and her students put them back. Changing the culture of classrooms is not impossible, but we must recognize how deeply our assumptions of learning and our roles as students and instructors are embedded in them. Perhaps this study can help open up a dialogue.

What would this look like? Recommendations presented here are not revolutionary, but instead offer modest, workable activities that do not involve redesigning buildings, classrooms, or even curricula. Many of the suggestions come directly from participants in this study. The goal is to find ways in which students may find greater agency within their classrooms. Recommendations begin with those who already have greater agency within classrooms, recognizing that any changes have a greater opportunity for success if they begin where power already resides instead of asking students, who already feel constrained, to challenge authority.

**Recommendations for Administrators**

Administrators probably have the greatest opportunities to alter classrooms. First, and most important, is their ability to provide permission for instructors and students to alter their classrooms, letting all involved know that change is possible and even encouraged. Some of the participants suggested painting their classrooms. While certainly possible, painting walls is rather permanent and messy and not likely an activity administrators would allow students to participate in. When walls are in need of painting, however, administrators could reach out to students and solicit ideas for paint schemes or present students with approved options they could vote on. The same is true for any renovations, such as installing new carpet or
furniture. Administrators could also make funds available for small additions, like posters or flags for classrooms.

Another avenue of change administrators could promote would be to hold meetings where instructors and students, either separately or together, could discuss the design and use of classrooms. The primary purpose of such meeting would be to encourage faculty and students to think about their classrooms as learning spaces and to think of ways course material can be expanded into the rooms.

**Recommendations for Instructors**

As the loci of control in their classrooms, instructors have a great deal of power over what happens in classrooms. The possibility for any change begins with instructors and depends on how much, or how little, they are able to engage with the learning environment in their classrooms. Even in their classrooms, however, community college instructors may not possess the agency to alter or even acknowledge the power that runs through their classrooms. A majority of classes are taught by adjunct instructors. A recent report published by the Center for Community College Student Engagement (2014) indicates that 58% of community college classes are taught by contingent, or adjunct faculty. Adjunct instructors might only teach one or two classes and feel like transient workers with no office or even homeroom from which to operate. As part-time employees, adjunct instructors may not have the sense of agency that would allow them to alter classroom environments or even engage students in ways that might challenge established norms (Fain, 2014). For those that might be willing to do so, they may not feel they have the support of the institution or have the time to
find out how to acquire permission for projects. Even full-time instructors, who teach five to eight classes each semester, may not have the time or energy to commit to projects in addition to their course load. Given that all instructors, full and part time, are frequently moving from classroom to classroom, the time it takes to discuss, let alone alter, class environments may not be time they believe they have to spare.

From a Marxist perspective, instructors experience alienation where they are removed from the mode of production, in this case the classroom, which is perceived as beyond their control (Lefebvre, 1991; Gottdiener, 1985). The following recommendations, then, should not be perceived as a list of shortcomings on the part of instructors, instead the hope is the suggested practices will be seen as the opening of a dialogue about classroom spaces, a discussion in which all stakeholders should feel welcome to participate as we struggle to achieve spatial praxis.

A first step, already taken by most instructors, but not all, would be to acknowledge the presence of students in their rooms, not merely as an audience, but as participants. At the least, instructors might open up the opportunity for students to discuss any problems they have with the room and its arrangement. Awareness of the space in a classroom is a necessary beginning that must precede any and all other efforts to alter the classroom environment.

The second step moves stakeholders from awareness to knowledge. In this case it might be possible for instructors and students to engage in exercises that examine how it is they came to be where they are. In some disciplines, particularly the social sciences, such
questions fit well into the curriculum. In other courses, discussions of the classroom and its use may only arise during the presentation of the syllabus, but even here a discussion of the room and its limits as well as where those limits come from may offer students and instructors insight into existence of power in their classrooms.

The final step involves taking action, that is, social praxis. This is the most challenging step and involves taking time and effort away from other activities which might not be possible. One action that might not take too much time would be to ask students how they might like the room to be arranged and enabling them to adjust the room as they enter the room before the class starts. This would, however, require having students return the room to its original state when leaving, which may cut into the already too small intervals between classes. Another activity might be students to contribute to the creation of the classroom space by bringing in objects to display about the room. Posters, both bought and handmade, especially those that relate directly to course material, flags, and even plants are possible additions instructors might allow. If they cannot be left up, part of each class, prior to meeting, could be time devoted to students making the room theirs.

Actions do not have to involve changing the physical environment. Social activities can also alter the material culture of a room. Icebreakers offer instructors and students the opportunity to learn more about each other and develop a sense of cohesion and accessibility within the classroom. Offering students the opportunity for daily reports on their work and challenges they are facing as students is another way to change the social environment of the room and create space for students to gain agency.
Recommendations for Students

Asking students to take control of their classrooms is asking them to risk resistance and even censure from their instructors and fellow students. If they are in a classroom where they have no permission to alter the environment, it is probably best if they do not challenge its arrangement. Students, however, still maintain some power and can enhance their sense of agency, even in restrictive classrooms, without resorting to subversive tactics. Students might be allowed to bring small items with them to place at their desk that provide a sense of comfort and control at least over their personal space. If instructors do not offer icebreakers during class, students might attempt to perform such activities themselves, either before or after class or during breaks if available. Fostering interaction among fellow students would allow students to feel more at ease among their colleagues as well as the room as a whole, offering a greater sense of comfort and even agency.

Recommendations for Future Research

This research represents an initial attempt to understand how students and instructors culturally construct community college classrooms. As such, this study leaves many avenues unexplored or, at best, lightly traveled. Further research into the material culture of community college classrooms might go in many directions, beginning with an expanded qualitative treatment of students and their perceptions. The interviews of fourteen participants should be joined by many others to broaden the data and to allow deeper analysis that brings in multiple factors not addressed here, particularly how issues of gender, ethnicity and race, age, socio-economic status, academic year and standing affect student perceptions.
and impact their sense of agency in a classroom. Further studies might incorporate quantitative data as well, employing surveys to broaden the sample size which should also include students at a range of community colleges including schools of different sizes and from different regions.

New research should also incorporate the voices of community college instructors and administrators. Instructors, along with students, are the primary occupants of classrooms and their voices need to be heard. Along with social factors like age, gender, ethnicity and race, instructors should also be sampled for employment status, years of teaching experience, and field of study. Another area of study might be to compare the perceptions instructors and students have of their institutions and how that might affect their classroom environments.

**Chapter Summary and Final Reflection**

The final chapter presents a couple conclusions that emerge from the findings. In the first conclusion the research here was found to agree in principle with the literature regarding the presence of power in classrooms and the role culture plays in constraining the behavior and learning of students. The second conclusion considers the possibility of changing in classrooms and resistance to any alterations. While generally supportive of the literature, the findings here suggest that instead of changing the room to change perceptions, it may be better and more effective to alter the culture of the classroom before changing the physical structure. Implications and recommendations for research and practice follow the conclusions and seek ways to apply the findings of this research to future projects with the ultimate aim
of finding ways that students can gain greater agency over their classrooms and their learning.

Peter Goodyear (2000) in an article concerning ergonomics and architecture writes “architecture (built space) does not determine activity (Goodyear, 2000, pp. 14-15, italics original to author). Having read many similar statements in my research, I did not really pause to consider it, but I noticed that directly above this line, in pencil, another reader countered “yes, it does.” My thoughts here were not for which author, if either, was correct, but that they found the place to have dialogue within the text, which in this instance can be considered a place. As another visitor to the same location, I found the contribution of the second writer enabled me to make my own contribution, not on the page but in my own mental space. The dialogue on the page opened up a place for me to participate. Where I normally would have just passed on by the sentence, instead I paused and considered and remade it. The same can be done for our classrooms. We can shape the room or it can shape us. We do not need new buildings or rooms, only a new perspective.
REFERENCES


(Eds.) Handbook of environmental psychology (pp. 28-54). New York: John Wiley and Sons, Inc.


Eliasoph, N. (2005). Theorizing from the neck down: Why social research must understand bodies acting real space and time (and why it’s so hard to spell out what we learn from this). *Qualitative Sociology*, 28 (2), 159-169.


Fromm, E. (1976). *To have or to be?* NY: Harpers & Row.


Available from ProQuest Dissertations & Theses Global. (UMI No. 3624613)


Sage Publishing.


Waters, R. (1975). Wish you were here. On *Wish you were here* [CD]. New York: Columbia Records.


APPENDICES
Appendix A

Recruitment Flyer

Seeking: Research Participants

How do you feel about your classroom spaces?

Are they effective learning spaces? Why or why not?

Can we change classrooms to make them better? How?

Would you like to participate in research to help better understand classrooms?

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<tr>
<th>Who’s Eligible?</th>
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<tr>
<td>Any student attending classes at Central Piedmont Community College is welcome to participate.</td>
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<th>What’s Involved?</th>
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<td>Two on campus meetings will be scheduled at a time and place convenient to the participant. The first meeting is a preliminary discussion of the research and will last 5-10 minutes. The second meeting will involve an in person interview that will last around 90 minutes. (Note: Participants will not receive compensation for participating in this study.)</td>
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<tr>
<th>About the Research</th>
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<tr>
<td>The purpose of this study is to determine how community college students make spaces for themselves and their learning in classrooms. Through interviews, observations, and photographs the goal is to develop a better understanding of how classrooms work and how we can make them better.</td>
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<th>About the Researcher</th>
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<tr>
<td>Beau Bowers is an instructor of Anthropology and History at CPCC. He is also a doctoral student in the Adult and Community College Education Program at North Carolina State University.</td>
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If you would like to participate or have any questions about the research, please contact me at 704-330-4257 or by email (preferred) at beau.bowers@cpcc.edu.
Appendix B

North Carolina State University
INFORMED CONSENT FORM for RESEARCH

**Title of Study:** Dimensions of Learning: Community College Students and Their Perceptions of Learning Spaces  
**Principal Investigator:** Beau Bowers  
**Faculty Sponsor:** Dr. Tuere Bowles

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**What are some general things you should know about research studies?**

You are being asked to take part in a research study. Your participation in this study is voluntary. You have the right to be a part of this study, to choose not to participate or to stop participating at any time without penalty. The purpose of research studies is to gain a better understanding of a certain topic or issue. You are not guaranteed any personal benefits from being in a study. Research studies also may pose risks to those that participate. In this consent form you will find specific details about the research in which you are being asked to participate. If you do not understand something in this form it is your right to ask the researcher for clarification or more information. A copy of this consent form will be provided to you. If at any time you have questions about your participation, do not hesitate to contact the researcher(s) named above.

**What is the purpose of this study?**

The basic premise for my research is to understand the learning spaces of community college students. I want to interview current community college students to understand how they perceive the spaces where they learn and also the spaces where they take classes and determine how they are different, if at all. My goal for this research is to learn how it is that students can perceive classroom spaces in ways that allow the rooms to be more effective learning spaces.

**What will happen if you take part in the study?**

If you agree to participate in this study, you will be asked to:

- Attend a brief pre-interview meeting where the research objectives will be introduced. A camera will also be provided to each participant with which to take photographs of their learning spaces. Pre-interview meetings will take place at a time and campus location of the participant's choosing.
• Return at a later scheduled time for a full, one-on-one interview that will last approximately one to one-and-a-half hours. Interviews will be held at a time and campus location of the participant's choosing. Interviews will be recorded.
• Review transcriptions (by email or in person) of recorded interview and make any revisions necessary.
• Brief follow-up questions may be asked to expand some responses. These may not be necessary, but if they are they will be conducted by email or in person at the participant's convenience.

Risks
I do not foresee any risks that this research may pose to participants or researchers.

Benefits
The primary benefit from this research will be to provide insight into an area of study that, to this point, has not been explored. Understanding how students construct learning spaces I hope will make both instructors and students more aware of their environments and how they can improve them to aid their learning.

Other than increased awareness of classroom spaces, I do not see any direct benefits that will accrue to participants.

Confidentiality
The information in the study records will be kept confidential to the full extent allowed by law. Data will be stored securely using measures taken to protect the security of data. Recorded interviews will be transferred from digital recording devices to encoded files that will be password protected and kept on the researcher's personal computer. When the research project is completed, the files will be deleted. Transcripts of the recorded files will also be kept confidential in password protected files which will also be deleted upon completion of the project. All paper documents produced for the research that include personal data or material from the interviews will be kept secure in a locked filing cabinet in the researcher's office. Once the project is completed, all documents will be shredded.

Identities of all participants will remain confidential. No reference will be made in oral or written reports which could link you to the study. You will NOT be asked to write your name on any study materials so that no one can match your identity to the answers that you provide. The identities of participants in the project will be represented by aliases provided by either the participant or researcher.

Compensation
There is no compensation for participating in this research.
What if you have questions about this study?

If you have questions at any time about the study or the procedures, you may contact the researcher at any time. Email (beau.bowers@cpcc.edu) is the best way to contact me but you may also call (704-330-4257) or visit my office at the Levine Campus of CPCC, room 2452.

What if you have questions about your rights as a research participant?

If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Deb Paxton, Regulatory Compliance Administrator, Box 7514, NCSU Campus (919) 515-4514.

Consent To Participate

“I have read and understand the above information. I have received a copy of this form. I agree to participate in this study with the understanding that I may choose not to participate or to stop participating at any time without penalty or loss of benefits to which I am otherwise entitled.”

Participant's signature __________________________ Date _________________

Investigator's signature _________________________ Date _________________
Appendix C

Pre-Interview Guide

- Welcome and thank participant.
- Introduce self and discuss basic premise of research; ask if they are interested in participating.
- Go over informed consent and have them sign form.
- Explain Photo Voice process and go over photograph instructions.
- Set up interview time and location.

<table>
<thead>
<tr>
<th>Photo Voice Guide</th>
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<tbody>
<tr>
<td>(handout to be provided to participants)</td>
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The purpose of Photo Voice is to promote discussion based on photographs taken by research participants. Take as many photographs as you think are necessary to provide a complete picture. For the interview I would like for you to photograph:

1) Learning spaces. Where do you learn best? Try to capture the features of that space in your photos.

2) Classroom spaces. Try to photograph the room as you see it and feel it.

If you're able to download the photographs and email them to me prior to our next meeting, I would greatly appreciate it. If not, we can download them when we meet next.
Appendix D

Interview Guide

- Welcome and thank participant. Offer water.
- Remind participant of informed consent.
- Download photographs from student.

Questions

1.) Tell me a little about yourself and your academic background.

2.) Why did you choose to attend community college?

3.) What would you say about your experience as a community college student?

Classrooms

The overall goal of this research is to understand how students perceive their classrooms. Are they places where you feel comfortable? Are you able to learn in them? Why or why not? The following questions address these issues.

4.) Take me through the process of a school day and how it is you feel as you come to class. Where do you sit? Why do you sit there? Do you sit in the same seat every day? Do sit in different places in different classes? Does where you sit affect how you feel about the room?

5.) Describe your classrooms. What physical features do you feel are relevant to creating the classroom space (i.e. chairs, desks, equipment, windows, heating/cooling, noise, etc.)?

6.) Do different classrooms feel differently? Can you describe those differences? What do you think accounts for the differences? Is it the room? The class? The people? Is it you? Who would you say “owns” the classroom?

7.) How would you describe the room’s effect on your ability to learn? Are there features that either help or take away from your ability to learn?

Learning Spaces

8.) Tell me about the places where you learn best. What makes them learning spaces?
9.) Using the photographs you took can you take me through what it is about the spaces that promotes your learning? Is it the physical environment alone or are there other factors? What are they?

Photographs

10.) Take me through a typical school day using your photographs. Describe your feelings at each stage of the process (e.g. entering the building, entering the room, finding your seat, getting set up for class, etc.)

11.) When I look at these pictures I see…

Restructuring

12.) Classrooms are constructed environments, in other words they were built to be classrooms. How well do you think they fit that purpose? What would you change?

13.) There are efforts to reshape how we build classrooms, but until then the rooms we have are what we have to work with. What can we do with the rooms as they are to make them more receptive?

14.) Have you ever tried to reshape a classroom to better fit your learning? Tell me about your experience. If not, how would you imagine reshaping one of your classrooms?

15.) Who owns the room? Would you expect any resistance to changing the room? Would some rooms be more accessible than others? Why is that?

Closing

16.) What would you like to add to this discussion? Are there questions you felt should be asked?

17.) Thank you for the time and effort you gave to this interview.
Appendix E

Demographic Survey

The following information requested is optional. Any details you share will be kept confidential and will be destroyed once the research project is completed. Identities of all participants will remain confidential. No reference will be made in oral or written reports which could link you to the study. The identities of participants in the project will be represented by aliases provided by either the participant or researcher.

Please provide a pseudonym for this study: __________________________

Date of Birth: ___________ Gender: _____ Do you live with your parents? ____

Marital Status: ___________ Children: ________

Employment Status: _________________

Semesters at CPCC: ________ Semesters at other college(s): _______

How many credit hours do you normally take each semester? ________

What program are you in? _______________ GPA: _____

Please select the highest educational level each parent has attained:

Mother:
☐ Unknown
☐ Some High School
☐ High School Diploma/GED
☐ Some College
☐ Associate’s Degree
☐ Bachelor’s Degree
☐ Graduate Degree

Father:
☐ Unknown
☐ Some High School
☐ High School Diploma/GED
☐ Some College
☐ Associate’s Degree
☐ Bachelor’s Degree
☐ Graduate Degree