Lanterns in the Bright Morning Hours:
Liberal Arts Education & Liberal Arts Colleges in the 21st Century

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ABSTRACT

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This dissertation is an analysis of liberal education at American liberal arts colleges in the early 21st century. The primary goal of this study is to construct a pragmatic definition of liberal education, nothing both conceptual and practical components. The conceptual aspects are drawn from the humanities literature, while the practical components are derived from the research question of this study: to what degree do liberal arts colleges have shared, cross-institutional components that comprise liberal education?

To answer this question, I analyze six secondary research questions on institutioal practices ad components of 103 liberal arts colleges:

1) If the school has an honor code, if and how does it relate to liberal arts education?
2) What educational experiences are required for all students?
3) What are the faculty-student ratios for each institution, including average class sizes?
4) How does the school articulate liberal education on institutional webpages?
5) What percentage of students live on campus?
6) What, if any, does the presence of co- and extracurriculars indicate about liberal education?

Data on these questions were found on institutional websites and college profile pages from the Carnegie Classification and University and College Accountability Network (U-CAN). A survey of 206 presidents and chief academic officers of schools in the sample offers data triangulation. The 71 responses to the survey confirm the findings and

analysis of the data. Regarding the practice of liberal education, community and curriculum respectively represent the most salient traits. Community dedicated to learning in and outside the classroom and structured around the curricular breadth and depth of study appears to be the main driver behind the practice of liberal education at liberal arts colleges. While curricular breadth and depth matter, the specifics of disciplines and the general education are quite varied among institutions. Indeed the breadth and depth of study's main purpose was found to be linked with this notion of community where students work closely with multiple faculty and staff.

To Ellen

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Chapter 1

Introduction

Overview

The death of the liberal arts college and the decline of liberal arts education in the United States has been an all too often sounded call throughout the past two centuries (Scott, 2013; Schussler, 2013; Thelin, 2011; Ferrall, 2011; O'Connel & Perkins, 2011; Astin, 1999; Bowen, 1997; Breneman, 1994; Heisler & Houghland, 1984). In the 1880s, liberal arts colleges were deemed to have an antiquated curriculum, to be generally "inadequate", and be "floundering in the matters of enrollments and finances" (Thelin, 2011, p. 90). Shortly after the beginning of the 20th century, academics from the University of Chicago, Columbia University, and Stanford University predicted that universities and junior colleges would force smaller private liberal arts colleges into extinction (Breneman, 1994, p. 20-1). From the 1970s onward, liberal arts colleges have faced financial crises due to their reliance on tuition dollars and fundraising (Zumeta et al., 2012; Breneman, 1994). With regard to liberal arts education, Governors of Florida, Texas, and North Carolina in 2012, 2013, and 2014 have publicly criticized liberal arts disciplines for not adequately preparing students for future employment (Kiley, 2013; Anderson, 2011; Dunkelberger, 2011). Though such criticisms are neither new nor singular, they reflect a general perception of the liberal arts and liberal arts colleges as

outdated and unnecessary. Against this perception, advocates of liberal arts education argue it is essential for a functioning democracy, an engaged and caring citizenry, the cultivation of critical thinkers and life-long learners, and an excellent undergraduate education, as well as much more (Berrett, 2013; King, 2013; Delbanco, 2012; Nussbaum, 2012; Ferrall, 2011; Roche, 2010; Farnham & Yarmolinsky, 1996; Oakley, 1992).

Abroad, the advocates are being heard as interest in liberal arts education and liberal arts colleges grows in countries such as China (Fischer, 2012; Hvistendahl, 2010), India, Russia, the United Arab Emirates, Ghana (Redden, 2009), Britain (Guttenplan, 2013), Israel (Jeffay, 2013), and the Netherlands (Redden, 2013). These developments are spurred in part to promote higher quality student outcomes such as creativity, abstract thinking, and critical analysis as well as to expand course offerings to include a broad liberal arts curriculum for a more dynamic pedagogical experience for students. The increased international attention is also indicative of interest in societal democratization because of the association noted above of liberal education as a key component of preparing individuals to be citizens in a democracy (Redden, 2009).

The perpetual criticisms, sustained advocacy, and newfound international interest gives evidence to the significant role liberal arts education and liberal arts colleges – despite the latter comprising approximately 4% of the 2,353 Title IV public and private postsecondary degree-granting institutions in the United States (National Center for Education Statistics, 2014) – play in postsecondary education both in America and abroad. Liberal arts education and liberal arts colleges in 21st century constitute "lantern[s] in the bright morning hours" (Nietzsche, 1974, p. 181). For its critics, both are

frivolous, useless, and superfluous; for its proponents, both are exigently necessary to dispel lingering shadows of ignorance and enlighten the world through education.

The literature and research on liberal arts colleges and liberal arts education remains lacking, even confusing because the terms of liberal arts, liberal arts education, and liberal education are at times used synonymously and other times differentiated. For this paper, the liberal arts refer to the set of disciplines traditionally defined through a liberal arts curriculum: a combination of disciplines from the fine arts, the humanities, social sciences, and natural sciences. Liberal arts education is the liberal arts curriculum within the broader pedagogic construction of liberal education. Because this study examines liberal education in liberal arts colleges, liberal arts education and liberal education as terms are indistinguishable in this institutional setting for reasons argued below.

The schools that focus solely on liberal arts education have been largely absent in higher education research. Indeed, Ferrall (2011) states, "[r]elatively little is written about liberal arts colleges…" (p. x). To be sure, some assessment work has occurred, though much like dissertations on liberal arts colleges, it tends to examine only a small, select number of institutions. Such a small number creates issues of generalizability. For example, the Center of Inquiry in the Liberal Arts at Wabash College's 2010 study examined 29 liberal arts colleges. The study is, however, designed only for institutions that volunteer to participate and does not limit institutional participation to liberal arts colleges. This limitation complicates, but certainly does not make impossible, the ability to use its data to comment on liberal arts colleges as a whole.

While this paper does not focus on student outcomes, it is important to examine what these institutions are doing to produce such outcomes for their students (if any credit is due to the institutions, perhaps it is all student inputs) and determine whether or not these schools even belong in the same categorical and organizational field. Understanding shared practices at liberal arts colleges may also inform how faculty and administrators at other institutions conceive of and engage liberal education.

For American educators to address the criticisms and continue educating generations of students, to help international educators build their own liberal arts schools, and to address a research gap in postsecondary education, there needs to be greater clarity on what constitutes a liberal education in American liberal arts colleges in the 21st century. Only then will we be able to begin assessing if either side, the advocates or critics, have merit by first clarifying these ubiquitous assumptions with empirical data.

Purpose

This paper explores how liberal arts colleges engage liberal education by starting where Ferrall (2011) ended his study on the liberal arts-vocational curricular dichotomy in liberal arts colleges. These schools purport to not only instruct a student in a particular discipline but also claim to produce better individuals, more responsible citizens, critical thinkers, community leaders, and graduates with strong ethical characters (Delbanco, 2012; Ferrall, 2011; Roche, 2010; Kuh 2005). In the conclusion of his study of liberal arts college mission statements, Delucchi (1997) suggests additional research should be conducted in order to understand the differences between what schools claim in mission statements and what they actually do. Clifton (2003) updates Delucchi to find considerable gaps between mission statements advocating liberal arts education and

curricular offerings that were increasingly vocational (e.g. degrees in technical or professional disciplines such as business, nursing, applied sciences like engineering, etc….). Ferrall's (2011) study of liberal arts college curricula is more up-to-date than Clifton's (2003), and thus will be used and discussed further below. Nonetheless, Clifton (2003) notes a significant discrepancy. He does not, however, examine other aspects that may constitute a commitment to liberal education that a student may experience, which is one purpose of this study. To this end, my own study follows Delucchi's (1997) advisement for "macrostudies of organizational fields in higher education" (p. 424).

Liberal arts colleges are the particular organizational field because of their "single-purpose" mission to undergraduate liberal arts education (Breneman, 1994, p. 4). The "single-purpose" commitment to liberal arts education also means that by selecting liberal arts colleges as the sample there are no other competing institutional activities. In other words, to study liberal arts education in liberal arts colleges is to study liberal arts education in the clearest context possible. Similarly, to study liberal arts colleges is to study liberal arts education institutionally, operationally, and pedagogically.

Background

Most liberal arts colleges were founded in the 19th century by religious groups seeking to stabilize and institutionalize their continued existence in the American landscape.

> As Americans migrated west, they took their support for higher education with them. Many a frontier village consisting of little more than a church and a handful of houses rushed to build a denominational college. Pioneers considered colleges

> essential to spreading religion, learning, and civilization, as well as to raising land values and attracting business. (Cohen, 2012, p. 4).

These schools tended to be small, private, residential colleges following the traditional British education of the liberal arts (Thelin, 2011; Cohen & Kisker, 2010). In distinguishing themselves as liberal arts colleges, these institutions stake claim to an educational heritage stemming from Greek and Roman antiquity (Kimball, 1995), which was founded on both Socratic questioning and Cicero's *artes liberales*. The aim of this education was to cultivate one's humanity (Heraclitus, 2009) for ethical living as a citizen in a democracy.

The history of liberal arts education, decidedly more complex and nuanced than liberal arts colleges, is summarized in the literature review, but liberal arts education divorced from liberal arts colleges is not my focus. These schools claim that students experiencing a liberal education become better people (Cohen & Kisker, 2010) and are typically thought to share the following educational experiences: "a curriculum based primarily in arts and science fields; small classes and close student-faculty relationships; full-time study and student residence on campus; and little emphasis on vocational preparation or study in professional fields" (Baker et al., 2012). In contrast with Baker et al. (2012), Clifton (2003), and Ferrall (2011) found liberal arts colleges shifting toward vocational preparation and away from a strict liberal arts curriculum.

At the beginning of the 21st century, liberal arts colleges, like most of American higher education, face difficult challenges (Zumeta et al., 2012). The economic climate of the past decade has resulted in lower average family incomes while many liberal arts colleges charge tuition prices as high as $50,000 or more a year, a price tag only matched

at out-of-state tuition by some selective public institutions and many private universities (Zumeta et al., 2012; Baldwin & Baker, 2009; Dreifus & Hacker, 2011). Decreasing family incomes and increasing tuition prices create a tension for schools between adhering to traditional missions while also doing whatever it takes to keep the school doors open (Weisbrod et al., 2008). These factors have inspired one liberal arts college president to describe the trend of high tuition prices as the "luxury branding" of the liberal arts.

Research questions

This study uses a descriptive design to discover what constitutes 21st century liberal education in liberal arts colleges. In line with Kimball (1995), a pragmatist theoretical framework grounds the research questions and methods of this study (discussed in greater detail below). Data are collected from public online sources such as the Integrated Postsecondary Education Data System (IPEDS) and official college websites. Using public data should allow for analysis across Baker et al.'s (2012) 137 institutions while answering the following primary research question: to what degree do liberal arts colleges have shared, cross-institutional components that comprise liberal education?

These components are comprised of both institutional practices as well as stated values. To examine these components, I use six secondary research questions established from a review of the literature on the traditional associations of liberal education: (i) if the school has an honor code, how does it relate to liberal arts education; (ii) What educational experiences are required for all students (e.g. graduation requirements)[1], (iii)

[1] I also explored residency requirements for this section, but was unable to discern any relevant data points. The residency requirements do not necessarily carry a stipulation on living in a residential dormitory. That

What are the faculty-student ratios for each institution, including average class sizes; (iv) How does the school articulate liberal education on institutional webpages; (v) what percentage of students live on campus; (vi) what, if any, does the presence of co- and extracurriculars indicate about liberal education? These secondary research questions assess what a student experiences while attending one of the liberal arts colleges in the sample. Findings from these questions unveil the cross-institutional similarities that could logically constitute the practice of liberal education given the single-mission focus of these colleges. The background of each of these secondary questions is expounded upon in the literature review, while further explanation of these questions may be found in the methods section.

Finally, deans and presidents of liberal arts colleges in the sample responded to the findings of this study through an online survey. The details of this survey are outlined below in the methods section and in Appendix E. While that information does not constitute a primary data source, it provides transactional validity (Marshall and Rossman, 2010, p. 41) and may support the findings. These data also provide an opportunity for emergent trends and any necessary follow-up investigation. By exploring these research questions and allowing practitioners an opportunity to answer the primary research question, we make steps toward understanding what presidents and deans think constitutes liberal education in the 21st century in liberal arts colleges.

Significance for policy and practice

There are implications of this study relevant to multiple constituents. First for academics, it seeks to help fill the research gap on liberal arts colleges and, more broadly,

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said, I did not discover a connection to the practice of liberal education. Further research on admissions, retention rates, and transfer-in rates would benefit this particular analysis of residency requirements.

liberal arts education. Addressing this research gap allows future researchers to understand better the differences between American liberal arts colleges and those being established internationally in Asia and Europe. As American liberal arts colleges decrease in number (Baker et al., 2012; Ferrall, 2011; Breneman, 1994), building the understanding of liberal arts education may help researchers determine if another institution-type is in fact delivering the educational experiences traditionally offered by these schools. Additionally, clarifying cross-institutional practices may be relevant to further research on what produces the student outcomes found in the literature on liberal arts major and liberal arts college graduates (Gordon, 2013; Arum & Roksa, 2011; Ferrall, 2011; Kiley, 2011; Roksa & Levey, 2010; Astin, 1999; Carnegie Foundation for the Advancement of Teaching, 1985).

Second, it helps make explicit the differences and similarities between these schools, which allows practitioners additional tools in potential cross-institution collaborations. As the landscape of higher education contracts and expands to various internal and external pressures, it is important for institutions to be able to work together to support and understand cross-institutional practices. Third, examining these practices also benefits for non-liberal arts postsecondary institutions to understand what constitutes liberal education, and how their institutions might support this mission. Likewise, this topic remains important for policy makers to consider when looking at how institutional practices affect student outcomes.

More broadly, if liberal arts education extends beyond a specific collection of disciplines, then what does it mean for community colleges, research universities, and small universities that offer liberal arts educational experiences? What role might online

education play in a liberal arts education? Is liberal arts education worth preserving in years to come? In short, questions such as these cannot be answered without better understanding what constitutes liberal education both in terms of values, which we know from the research such as Ferrall (2011), Kimball (1995), and in practice, which remains to be understood.

Theoretical framework

Following Kimball (1995), the philosophy of pragmatism constitutes the primary theoretical framework for this study. A pragmatist conceptual model is one that uses multiple sources of information, addressed in this study through secondary research questions, to construct one or multiple frameworks to define a phenomenon. Like the frameworks, William James posits pragmatism itself as an amalgamation of philosophical views, namely those of Socrates, Aristotle, John Locke, George Berkeley, David Hume, and Shadworth Hodgson (Rosenthal, Hausman, & Anderson, 1999). This approach is used because of the debate noted in the introduction about how much value liberal arts education and liberal arts colleges hold for the 21st century. I argue that no one really knows because no one really understands if, or perhaps even how much, these schools actually practice liberal arts education (i.e. the debated value).

For his study, Kimball (1995) utilized pragmatism to map the conceptual and practical elements of the term liberal education to build a philosophical-historical etymology through "assessing a body of scholarship that has foundered on the problem of relating descriptive and normative purposes" (p. viii). Kimball's own pragmatist approach stems from the initial pragmatist maxim put forth by Charles Sanders Peirce, an early advocate of pragmatism who greatly influenced James's own work (1878):

"Consider what effects, which might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of those effects is the whole of our conception of the object" (section 2). In other words, a phenomenon may be understood through examining both its conceptual and practical components.

In a broad sense, a pragmatist approach can be characterized in five parts: nominalist, empirical, rational, contextual, and dynamic (Kimball, 1995, p. ix). In other words, the pragmatist method assumes a phenomenon is not universal (nominal) but able to be logically studied (rational) through observation and experiment (empirical) in a specific context (contextual) to understand the ways in which it functions (dynamic). For this study, liberal education exists (dynamic) in the context of liberal arts colleges (contextual, nominal), studied using qualitative tools (empirical) of document analysis to build logically two analyst-constructed typologies, conceptual and practical (rational). It is through these pragmatist typologies that cross-institutional analysis is made possible.

These typologies present a "general frame of reference… [that] constitutes a logically coherent whole" (Kimball, 1995, p. viii-ix). The typologies are built through "infer[ing] the logical consequences that attend the use of the [phenomenon]" (Kimball, 1995, p. viii). Therefore the rubrics and components of the typologies (secondary research questions: honor codes, faculty-student ratios, graduation requirements, "about" websites) are inferred from the literature and my own understanding of liberal arts colleges.

The pragmatist approach and construction of typologies help remedy the research gap (Ferrall, 2011) and the difficulty of studying liberal arts colleges as a distinctive organizational field (Breneman, 1994). To the latter point, Kimball likewise uses

pragmatism to address a similar issue when "assessing a body of scholarship that has foundered on the problem of relating descriptive and normative purposes" (Kimball, 1995, p. viii).

James' own approach to pragmatism is important to the theoretical framework of this study for another reason. He defines pragmatism as an active philosophy that focuses on "practice, consequences,… purpose, effort,… change, and difference" instead of "theory, pure reason,… disinterested contemplation, pure reason [sic],… absolutism, finality, [and] sameness…." (Rosenthal, Hausman, & Anderson, 1999, p. 33). Heretofore, the literature on liberal arts colleges and liberal education has been predominantly value-centered, an issue discussed in further detail in the literature review. Thus pragmatism is essential in exploring and furthering our understanding of how institutions in the sample engage liberal arts education in a practical sense.

Chapter 2

Literature review

The following section is comprised of a note on the research gap and three main content areas. The first main section covers the philosophical and historical roots of liberal arts education. Kimball's *Orators & philosophers* (1995) is a philosophical history of liberal education, its origins and developments from ancient Greece and Rome to contemporary times. Francis Oakley's *Community of learning* (1992), also a history, focuses on the liberal arts and its role in the formation of institutions devoted to liberal education. Finally, Delbanco's *College* (2012) outlines the purpose, origin, and some developments of the traditional notion of undergraduate, residential education. While this section is more oriented historically and philosophically as well as value-laden than the others, it is nonetheless essential to understand that this is how these schools view themselves and their educational mission.

In the second section, research on liberal arts colleges follows. First and foremost, David Breneman's *Liberal arts colleges* (1994) is an economic analysis of the financial health of liberal arts colleges, and it still remains an essential text on liberal arts colleges given the research gap. Baker et al. (2012) decided to update Breneman's study approximately 15-years later. Victor Ferrall's *Liberal arts at brink* (2011) similarly offers

an economic analysis, though not as robust as Breneman and Baker et al., and considers various aspects of the current state of liberal arts colleges. The aspect most salient to this study is Ferrall's curricular binary of liberal arts-vocational disciplines and the data he provides.

Third, definitional problems are noted when discussing liberal arts education. Finally, a brief note on student inputs and outcomes research concludes the literature review. The organization of this section generally follows the chronological order in which the books discussed were published and subsequently influenced preceding works. It is within this literature that this study stakes a claim as the next step in scholarship.

Research gap

The literature on liberal arts colleges is comprised of anecdotal defenses of liberal arts education (Roche, 2010; Farnham & Yarmolinsky, 1996), histories (Kimball, 1995), historical-anecdotal hybrids (Delbanco, 2012; Oakley, 1992), and few research studies (Baker et al., 2012; Ferrall, 2011; Breneman, 1994). These schools have traditionally received modest attention in postsecondary research, but have received considerable attention historically in the broader discussion of higher education (Thelin, 2011, p. 41). This lack of attention in research is likely due in part to liberal arts institutions' small number of schools and relative autonomy when compared to state higher education systems. Also, these schools do not conduct research like larger universities nor enroll anywhere near the number of students as community colleges. It should be noted, however, that liberal arts colleges produce a disproportionate amount of students attending graduate school and obtaining Ph.D.'s (College Solution, 2013; Ferrall, 2011; Kuh, 2004; Breneman, 1994).

To complicate matters, it is difficult to empirically study some of the components of liberal education. For example, Robert Maynard Hutchins, former president of the University of Chicago, stated in a public address, "All attempts to teach character directly will fail. They degenerate into vague exhortations to be good which leave the bored listener with a desire to commit outrages which would otherwise have never occurred to him" (Bowen, 2012). Liberal arts education explicitly values character and ethical development for students. If Hutchins is correct that "teach[ing] character directly will fail," then how does one cultivate ethical development and the maturing of a student's character? James Garland (2011), president emeritus of Miami University, Ohio, posits that humility, "the bedrock of a liberal education," burgeons from the realization of how little one knows. He too acknowledges that the transmission of such wisdom can be not just difficult but also Sisyphean. One then might inquire as to how it is done in practice at liberal arts colleges that claim to focus exclusively on such a task.

Some practices have been suggested that constitute a liberal education, such as small seminars instead of lecture classes (Baker et al., 2012) or exposure to a broad range of disciplines through general education (Lee, 2013). If class size or student-faculty ratios are the sole shared component of liberal education, then the liberal arts-vocational curricular binary may not be a useful distinction to make. It would mean that liberal education is a pedagogic experience, either instead of or in addition to, a curricular distinction. Liberal education as a pedagogic experience may indicate that liberal education could be synonymous with a close faculty-student mentorship and nothing more. This finding, similar to Clifton (2003) and Ferrall (2011), would challenge the norm found in the literature that connects liberal arts disciplines with liberal education.

Another complication is that research has indicated that liberal arts colleges are transitioning academic offerings from the liberal arts to increased vocational programs (Ferrall, 2011; Clifton, 2003). If liberal arts colleges should not be grouped by a curricular commitment, then are there other institutional aspects that support the continuing placement of liberal arts colleges into a group? Are there cross-institutional practices that would comprise liberal education beyond or in addition to curriculum?

This study is only one step of many required to substantially address the research gap on liberal arts colleges and the education these institutions offer. Aside from staking claim to the liberal arts heritage, it is worth considering what these schools have in common, and if these commonalities affect how we as researchers and practitioners in higher education understand liberal education advancing into the 21st century.

Philosophical & historical tradition

Kimball's *Orators & Philosophers* (1995)[2].

In *Orators & Philosophers* (1995), Bruce Kimball offers a history of the liberal arts tradition that is important to understand for this study. Kimball (1995) explains that the "good citizens" component of liberal education tends to be directly associated with general education, which he defines as "a coherent and unifying purpose and structure for a curriculum that will serve all students throughout their lives" (Kimball 1995 p. 265). The general thinking is that a dynamic education where faculty experts instruct students in a wide variety of disciplines prepares those students to live dynamically in a complex world. Over the past few decades, however, college curricula and faculty-departmental

[2] Kimball's (1995) text, originally published in 1986, influences Oakley (1992), which creates some citation confusion when discussing how Oakley (1992) was influenced by Kimball (1995).
[3] Here, I read Clotfelter to be referencing the Greek notion of *paideia*, which some scholars argue became the Latinized *humanitas*. *Paideia* as a term has historically been translated to mean,

foci have shifted from general education to a specialized, narrower focus (Kimball 1995; Project, 1990). Yet despite this shift, many schools still emphasize community and the liberal arts (Kimball, 1995, p. 264, 265).

Foundations.

Kimball (1995) argues the historical roots of liberal arts education burgeon from two traditions in Greek and Roman antiquity. First, Plato and Aristotle and the philosophical tradition focused on the search for truth and leading the ethical and examined life. Second, Isocrates and Cicero and the orator tradition emphasized oratorical and intellectual articulation. Cicero was the first to use the term *artes liberales*, which are defined by seven subjects. These subjects include the *septem artes liberales* (seven liberal arts) of the *quadrivium* of mathematics (arithmetic, geometry, music, astronomy (then indistinguishable from astrology)) and *trivium* of language (rhetoric, grammar, logic). While it can be said that Cicero originated the term *artes liberales*, Kimball argues that the Greeks invented the *septem artes liberales* conceptually.

Kimball (1995) explains the significance on *liberales* in Roman times that resulted from the confluence of the orator and philosopher traditions,

> ... *liberalis* denoted "of or relating to free men." Quite significantly, this denotation implied both the status of social and political freedom, as opposed to slavery, and the possession of wealth, affording free time for leisure. Thus *liberalis* characterized the *liber*, the free citizen who was "gentlemanly or ladylike … magnanimous, noble, … munificent, generous," as well as the "studies, education, arts, professions" in which the free citizen participated (p. 13).

It is important to note a number of things. First, the *quadrivium* and *trivium* are the foundation for the later curricular differentiation between liberal arts and vocational disciplines. Second, the *liberalis* is the foundation for viewing education as more than simply content transfer or learning a particular skill. It is an education to cultivate a better

person meant for leadership and civic duty while conveying a prestige of high social standing. Traces of the curricular distinction and the goal of producing better people can be found, over 21 centuries later, in liberal arts college literature and claims about liberal arts education.

Most significantly, between Greek and Roman antiquity and 21st century American higher education, the curricular distinction shifted according to the times as scholars beginning in the 15th century romanticized ancient Greece and Rome (Kimball, 1995, p. 77). For example, Renaissance humanists defined *artes liberales* with *studio humanitatis* and "the disciplines of grammar, rhetoric, poetry, and history, often combined with moral philosophy" (p. 78). Speaking to the broader components of liberal education, humanism was committed to "moral instruction of the good citizen… [and the] continual refinement of the human personality" (p. 78). Of note is that the idea for educating and determining what constitutes a better person became Christianized with the introduction of moral philosophy into the liberal arts. During this time, Renaissance humanists began to view classical study, i.e. the liberal arts, as its own important activity for a scholar and *not* simply preparation for engaging moral philosophy or theology (p. 78).

The "relativistic" (Kimball, 1995, p. 7) use of the term liberal arts education as well as the classical and modern foundations have been established to give background to the current study of liberal arts colleges and liberal education. It is, however, unclear if the history restricts defining liberal arts education as a practice of simply engaging a specific curriculum of subject matters. As will be discussed, this does not appear to be how liberal arts education is treated in the literature. Thus it remains to be seen what

constitutes liberal education beyond a curricular distinction and why it is common to define it in terms of values and not practices.

The liberal-free ideal.

Another important aspect of Kimball's (1995) work is what he deems the liberal-free ideal, which arose in and after the Renaissance with figures like René Descartes, Thomas Hobbes, Immanuel Kant, John Locke, and Jean-Jacques Rousseau. Kimball defines the liberal-free ideal with seven characteristics:

1. "freedom from a priori strictures and standards" (p.119);
2. "an emphasis on intellect and rationality" (p. 120);
3. "critical skepticism" of everything (p. 120);
4. the "new virtue" of "tolerance", which itself was dependent on "the epistemology of skepticism" (p. 121);
5. "egalitarianism… [and] the relativizing of standards and norms" (p. 122);
6. the "ethic of individualism" and the "emphasis upon volition of the individual rather than upon the obligations of citizenship found in the *artes liberales* ideal" (p. 122);
7. "individual growth… as an ideal, an end in itself" (p. 122).

He deems this a liberal-free ideal because its figures lay claim to the liberal arts tradition, interpret it (again, its relativism evident), and emphasize the 'free' connotations in the word liberal, *liberales*, *liberalis*. According to Kimball, the liberal-free ideal, and its emphasis on the individual, greatly influenced what became liberal arts education. Over time, the emphasis on the individual coupled with the emphasis on community becomes the individual as citizen, with education being the means to prepare individuals for critical and compassionate citizenry. It is also the liberal-free ideal that later caused the separation of liberal arts education from being understood and defined strictly in religious, predominantly Christian terms. Reflecting this separation in the 21st century is that many liberal arts colleges, though founded by religious organizations, are now secular and independent.

Oakley's *Community of Learning* (1992).

Francis Oakley, former president of Williams College and professor of history, argues for the values and advantages to studying the liberal arts through a text that "reflects [his] own rather harried attempt… to come to terms with the American undergraduate experience" (Oakley, 1992 p. vii). In the preface, he admits that *Community of Learning* (1992) is somewhere between a work of scholarship and an "exercise of "emotion recollected in tranquility" (p. vii). His text is also a response to Roger Kimball's (no relation to Bruce) criticism of the humanities as "a program of study that has nothing to offer… but ideological posturing, pop culture, and hermeneutic word games" (Oakley, 1992, front flap).

In many ways, Oakley's text exists as a follow-up to Kimball's (1995). Whereas Kimball offers a philosophical history of the liberal arts, Oakley outlines a history of the liberal arts as an educational model, its benefits, and how it existed in the late 20th century. Kimball represents a philosopher examining the subject matter. Oakley offers a humanities-historian approach with statistical analysis to buttress his claims. It should be noted, however, that Oakley's text focuses on the general idea of a liberal arts educational model and not specifically liberal arts colleges. One can see Kimball's (1995) liberal-free ideal in Oakley's (1992) understanding of the importance of undergraduate education:

> It is the ideal enshrined in the belief that the oldest, the finest, the noblest, the most enduring mission of service to the larger society that colleges and universities can properly be called upon to fulfill is that of providing a privileged forum, one buffered by the very tenacity of its own commitment to freedom of inquiry and freedom of expression from the more egregious intrusions of prejudice and intolerance; a sort of dialectical space wherein the complex and testing issues of the day can be vigorously debated and tenaciously explored in an atmosphere distinguished above all by its openness, its rationality, its civility, its generosity of spirit (Oakley, 1992, p. 165).

It is important to note that what Oakley proposes is essentially a pedagogic construct, a "community of learning," of Kimball's liberal-free ideal. Oakley's proposed education is also primarily a series of value claims. It points to how the education should function, and within which space, yet leaves out the practices that actualize these commitments to a "dialectical space… distinguished by its openness, its rationality, its civility, and its generosity of spirit" (p. 165). Oakley's idea of a "dialectical space" (1992, p. 165) engenders the secondary research question pertaining to this sense of a close, intimate community.

Delbanco's *College* (2012).

Delbanco (2012) echoes a curricular shift noted by Kimball (1995) when quoting Derek Bok's *Universities in the Marketplace* (2003): "… faculties currently display scant interest in preparing undergraduates to be democratic citizens, a task once regarded as the principal purpose of a liberal education and one urgently needed at this moment in the United States" (p. 149). Delbanco suggests that Bok's comment is found in a footnote because it "was such old news" (p. 149) in 2003. Nine years later, Delbanco still finds this claim to be true. He begins his text offering arguments for collegiate education: individual/national, political, and enjoyment of life.

The argument for the individual resides primarily in economic terms as it benefits both the "economic health of the nation" and "the economic competitiveness of the individuals who constitute the nation" (p. 25). This argument is fairly common – namely, those attending college are better workers, earn higher salaries, and by extension drive national economic growth. Those educated individuals in turn have children that are more likely to attend college than non-college educated parents, which in turn creates a

reinforcing cycle of collegiate education. Thus, education benefits the individual and the nation.

In line with Thomas Jefferson and John Adams, Delbanco puts forth a political argument for education by outlining various positions and complexities to contemporaneous debates on health care, energy, reproductive rights, and public education. These debates reside in the public sphere and as such we, as citizens, influence and act upon them. He points out, in echoing John Alexander Smith, an Oxfordian moral philosopher, how education may aid us as citizens participating in these debates: "the most important thing one can acquire in college is a well-functioning bullshit meter. It's a technology that will never become obsolete" (p. 29).

Delbanco offers a third reason for college education. As with Ferrall (2011), both authors make an anecdotal claim about the importance of a liberal arts education with regard to a student's future access, in the broadest of definitions, to culture. In a conversation, an alumnus of Columbia, where Delbanco teaches, offered his own take on the main point of college education: "Columbia taught me how to enjoy life" (p. 32).

Like Oakley (1992), Delbanco (2012, p. 3-4) proposes his own ideal of undergraduate education that harkens to Kimball's liberal-free ideal with its focus on tolerance, skepticism, ethical living, and an emphasis on the individual:

1. A skeptical discontent with the present, informed by a sense of the past.
2. The ability to make connections among seemingly disparate phenomena.
3. Appreciation of the natural world, enhanced by knowledge of science and the arts.
4. A willingness to imagine experience from perspectives other than one's own.
5. A sense of ethical responsibility.

Delbanco (2012) claims that "these habits of thought and feeling… make themselves known not in grades or examinations but in the way we live our lives" (p. 4). Delbanco's

use of the term "habits" relates back to Aristotle's habits from *Nicomachean Ethics* (1999) and the philosophical tradition in Kimball (1995). Once again, a liberal arts education, the ideal form of undergraduate education, is something far more than content transference or specialized, vocational training. Referencing Thomas Jefferson, Delbanco (2012) makes distinct claims to the importance of the education for citizenship, civic duty, and the future of democracy (p. 3, 28-9, 32, 35) as well as its benefits for the individual (p. 3, 28). Like Nussbaum (2012), Delbanco does not posit the importance of both community and individual as mutually exclusive. Indeed, these two components are best understood as reinforcing each other.

Summary.

This review has so far briefly traced the philosophical and historical roots of liberal arts as a concept while noting its associations with religious, civic, and individual values. These roots comprise the heritage to which liberal arts colleges stake claim. Thus, it remains to examine the relatively small amount of literature on liberal arts colleges as institution types. This next section is problematic in two ways. First, there exists very little research that focuses on these schools as a group of institutions. Second, the first problem exists because most of these schools are historically autonomous and independent from one another with the exception of associations like the Great Lakes College Association. Therefore, research, including peer-reviewed journals and dissertations, that focuses on a small sample of liberal arts colleges is not covered below. This choice is made because it is unclear whether such institutional-specific findings would be generalizable to the whole field. Instead, the focus is on the literature that examines these schools as a group – a group that stems directly from Breneman's (1994)

foundational book on liberal arts colleges – in order to maintain methodological consistency of focus and scope.

Liberal Arts Colleges

Breneman's *Liberal arts colleges* (1994).

Liberal Arts Colleges: Thriving, Surviving, or Endangered (1994) by David Breneman analyzed the financial health of such institutions. His text remained largely the only authoritative book on the liberal arts colleges until Victor Ferrall wrote *Liberal Arts at the Brink* (2011). In it, he examined 212 colleges that meet his criteria for constituting a liberal arts college. An academic and former president of Kalamazoo College in Kalamazoo, Michigan, Breneman assessed the financial state of these institutions through an economist's lens and acknowledged the limitations of such a perspective.

He notes that his own economic analysis and outlining of these schools' financial history misses some of the key components that sustain these schools, such as alumni loyalty and dedication. He concludes that most institutions, at least as of the early 1990s, appear to be financially "thriving" or "surviving," with a few "endangered." The book provides a foundation to the financial history of institutions in this study.

Most importantly, his study remains an overview that establishes that the more financially sound an institution, the higher number of liberal arts majors offered. His study gives evidence of the interrelated nature of mission fulfillment and institutional resources (Weisbrod et al., 2008). Breneman admits his optimism with reserve in that the schools will need to figure out how to sustain financial soundness in their own right. After all, Breneman finds these schools islands unto themselves that, due to the significant autonomy noted above, makes research difficult. To tackle this difficulty, he

advises one to examine schools in a case-by-case basis (Breneman, 1994). Thus, the rubric presented in the methods section examines each institution school-by-school to weave together an accurate picture of liberal arts education to determine if any cross-institutional practices exist.

Baker et al. (2012).

Baker et al. (2012) updated the 212-sample set using Breneman's criteria and determined that in the last 18 years, only 137 institutions still qualify as liberal arts colleges. Simply put, liberal arts colleges as an institution type are disappearing. Because Baker et al. directly update Breneman's criteria, my study uses Baker et al.'s sample. Additionally, Baker et al. (2012) summarize research that indicates the following shared experiences and characteristics of liberal arts college students when compared to students of other institution types: high academic standards, close community, high satisfaction with educational experiences (see also Kiley, 2011), and high levels of student engagement (Hu & Kuh, 2002).

Ferrall's *Liberal arts at the brink* (2011).

Victor Ferrall, a lawyer by trade and president emeritus of Beloit College in Beloit, Wisconsin, criticizes the recent rise of vocational and technical degree programs in traditional liberal arts colleges. Like Breneman (1994), Ferrall remains deeply concerned that he sees the liberal arts educational model slipping further away into something wholly different from its 20th century existence. The most useful aspect of his book, as well as Breneman's (1994), remains that the two authors take the time to convey that many liberal arts institutions (about or over half in each case) remain in financial (i.e. Breneman's surviving or endangered) and curricular jeopardy (i.e. decreasing liberal arts

majors). The threats that both authors note remain, particularly in the last decade of economic turmoil in the beginning of the 21st century.

Ferrall (2011) finds the financial struggles of an institution to be not the cause of their perceived tumultuous standing noted in this paper's introduction but rather indicative of the larger issue of declining demand for liberal arts education (p. 158). Researchers have noted that liberal arts colleges have gradually shifted curricula over the last 40 years to more professional disciplines, which is synonymous with vocational and technical, disciplines (Baker et al., 2012; Ferrall, 2011; Breneman, 1994; Oakley, 1992).

Returning to the Oakley's (1992) and Delbanco's (2012) respective liberal education constructs, Ferrall (2011) also outlines the benefits of a liberal education as the following (p. 17-18):

1. Critical self-examination;
2. Persuasive and graceful disputation;
3. Effective written communication, that is, the ability to say in writing what is intended to be said;
4. In Martha Nussbaum's phrase, "narrative imagination," that is, compassion and the inclination and ability to put oneself in another's shoes;
5. Sophisticated technology-based exploration;
6. A continuing drive to generalize, to search for the common denominator;
7. A well-developed understanding of the human condition, reflected in the ability to predict the conduct of others with substantially better than average accuracy;
8. An appreciation of creativity and beauty;
9. An understanding of history and its consequences;
10. An intellectually entrepreneurial spirit;
11. A commitment to service to others and the community, that is, a sense of social responsibility; and
12. An examined life.

Not only can one find the perseverance of the philosophical tradition in points 1, 4, 7, 11, and 12 but also the oratorical tradition in points 2, 3, and 8. Ferrall (2011), like Delbanco (2012), combines both the civic and individual purposes of liberal arts education.

Other indications of transition.

Pace and Connolly (2000, p. 64) found that the impact and scope of the liberal arts have increased at research universities. The authors cite other scholars (e.g. Breneman) who claim that many liberal arts colleges have adopted so many professional programs and degrees that they would be better classified as something other than liberal arts institutions. They conclude that research universities (RU in the Carnegie classification system) are housing the liberal arts.

Feerrar (2005) examines the effects of the 2002-2003 "economic downturn" on liberal arts colleges. His study revealed that the wealthier institutions in his six-institution sample experienced less volatility than the less wealthy and that most schools enjoyed an increase in admissions, which helped stave off other negative effects of the economic downturn such as more dramatic tuition increases or layoffs from faculty and staff. Feerrar's research indicates a sustained interest in liberal arts education despite the economic turmoil of the last decade, as well as further confirmation of Breneman's (1994) findings and predictions. An important caveat to Feerrar's work is that it is unclear how generalizable his findings are for other liberal arts colleges, as noted above.

Definitional problems

Carnegie Foundation classifications.

In addition to the research gap on liberal arts colleges, there also exists an issue with what exactly constitutes a liberal arts college. Since 1973, the Carnegie Foundation has made efforts to adequately classify and monitor postsecondary institutions of higher education. In the past, liberal arts colleges were identified in their classification of Baccalaureate Colleges. As Ferrall (2011) explains, in 1970 the Carnegie Foundation classified liberal arts colleges by the academic programs that an institution offered. The

precedent for such classification arose from the traditional idea of a liberal education (Kimball, 1995).

The Carnegie Foundation classified two types of liberal arts colleges (Breneman, 1994, p. 11):

> Liberal arts colleges I: These highly selective institutions are primarily undergraduate colleges that award more than half of their baccalaureate degrees in arts and science fields.
> Liberal arts colleges II: These institutions are primarily undergraduate colleges that are less selective and award more than half of their degrees in liberal arts fields. This category also includes a group of colleges that award *less* than half of their degrees in liberal arts fields but, with fewer than 1,500 students, are too small to be considered comprehensive.

In 1987, 540 schools were identified by the Carnegie Foundation as either liberal arts college I or liberal arts college II (Breneman, 1994, p. 11). By 2001, the Carnegie Foundation had eliminated the word 'liberal' from their classification of baccalaureate colleges and replaced it with the larger curricular binary of "arts and sciences" (formerly known as liberal arts) and "occupational and technical" (Ferrall 2011, p. 11). This decision means researchers are tasked to define what constitutes a liberal arts college. For the purposes of this paper, I rely on Breneman's (1994) and Baker et al.'s (2012) definition. This definition is explained in greater detail in the methods section.

A note on the term liberal arts education.

Similar to the difficulty of defining which institutions constitute liberal arts colleges, one significant issue facing liberal education in general is that academia cannot agree about what exactly constitutes a liberal education except for traditionally defined academic disciplines (Grubb and Lazerson, 2005). The terms liberal arts, liberal education, and liberal arts education may be found throughout higher education, in the literature (Delbanco, 2012; Ferrall, 2011; Breneman, 1994), college and university

mission statements regardless of institution type (Morphew & Hartley, 2006; Delucchi, 1997), and news publications and periodicals (Kiley, 2013). Despite this ubiquity, the terms tend to be treated as value statements, without indication of specifics such as components or practices aside from the curricular distinction noted in the Carnegie Classification system.

For example, the Association of American Colleges & Universities (AAC&U) (2012) offers definitions of liberal education, liberal arts, and general education. While the definitions for liberal arts (defined disciplines or majors) and general education (students taking classes from many disciplines prior to graduation) are straightforward, its definition of liberal education consists solely of outcomes and does not mention institutional practices that cultivate these outcomes. The AAC&U's (2012) definition, which aligns with the literature (Delbanco 2012, Ferrall 2011), mentions the cultivation of civic or community responsibility. One may ask how liberal arts colleges, whose mission of liberal arts education is so pervasive that it defines these schools as institution-types, cultivate social responsibility in students. Thus, the research gap has two parts. First, as Ferrall (2011) points out, postsecondary researchers have largely ignored liberal arts colleges. Second, while the ideals of liberal education are often sounded, exploring the components of what constitutes liberal education and determining the means of cultivating liberal education ideals have been left unstudied. I focus this study, in turn, on those institutional components that constitute or at least indicate the practice of liberal education, the sole mission commitment of these institutions.

As noted earlier in the introduction chapter, liberal education has been and continues to be a contested term. Overall I am not interested in analyzing the nuances of

the various arguments for or against liberal education, which would require a very different course of study. Instead, my goal is to explore what the practice of liberal education entails in the context of liberal arts colleges. Exploring the data on institutional components of these colleges in turn will allow me to build a pragmatic typology of liberal education that defines both its concept and practice.

A note on inputs and outcomes

To be clear, some research has focused on the liberal arts, liberal arts majors, and student experiences with the liberal arts. This research indicates the benefits of a liberal arts education and its outcomes, such as higher performances on learning assessments and graduate standardized tests (Arum and Roksa, 2011; Gordon, 2013), higher satisfaction rates of alumni with education experiences when compared to other four-year institution types (Kiley, 2011; Carnegie Foundation for the Advancement of Teaching, 1985), and higher levels of professional success, both for liberal arts college alumni (Ferrall, 2011) and liberal arts majors in general (Roksa & Levey, 2010). In multiple surveys, employers state a preference for liberal arts students due to having highly transferable skills such as critical thinking and analysis, broad intellectual range, and communication skills (Hart Research Associates, 2013; Millennial Branding, 2012; Roksa & Levy, 2010), though to be sure some employer surveys note that the ideal job applicant has both a liberal education foundation coupled with some technical experience (Marklein, 2013). These surveys are reflected in some liberal arts education defenders positions as well, such as Keller and Archibald (2013) and Nussbaum (2012). According to Nussbaum, in her advocacy of the humanities, "innovation requires minds that are flexible, open, and creative; literature and the arts cultivate these capacities… liberal arts

graduates are hired in preference to students who have had a narrower preprofessional education, precisely because they are believed to have the flexibility and the creativity to succeed in a dynamic business environment" (p. 112).

Not only do liberal arts students attend graduate school in higher numbers than those with vocational degrees (Adamuti-Trache et al., 2006; Koplik & Graubard, 2003), but liberal arts colleges also produce a disproportionate number of PhDs on a per capita basis given their small size when compared to other postsecondary institutions (College Solution, 2013; Ferrall, 2011; Kuh, 2004; Breneman, 1994). For example, in a top-ten ranking of all institutions that produce PhDs across all disciplines, four out of the ten are small liberal arts colleges included in this sample: #3 Reed College, #6 Carleton College, #7 Grinnell College, #10 Oberlin College (College Solution, 2013). Like Bryn Mawr College, which is ranked #8, some liberal arts colleges have expanded degree programs and missions to become schools closer to small comprehensive universities. College Solution (2013) goes on to rank top-ten PhD producing institutions by field. Small liberal arts colleges appear on every list in every category, with as a few as two institutions in math and statistics, #3 Reed College and #7 Pomona College, and as high as seven institutions in anthropology, #2 Beloit College, #3 Grinnell College, #4 Reed College, #6 Pomona College, #7 Wesleyan University, #8 Marlboro College, #9 Haverford College. Four categories contain six liberal arts colleges: history, chemistry, social sciences, and English and literature. College Solution (2013) notes that "[o]n a per capita basis… liberal arts colleges produce twice as many students who earn a PhD in science than other institutions" (1 par., Bottom line section).

These outputs are important to note because it appears something is working very well for liberal arts majors and in particular liberal arts college students. To bifurcate liberal arts education, we may consider (1) student inputs (e.g. test scores, socio-economic status, college preparation, educational attainment of parents) and outcomes (e.g. alumni satisfaction, graduate school attendance), or (2) what occurs in the course of a liberal arts undergraduate education (e.g. writing intensive requirements, close faculty interactions). While student inputs and outcomes are important to study, it is not the focus of this study. One reason for this decision is because that area has received some attention in higher education research. Another reason is that it does not answer what exactly constitutes a liberal arts education.

Chapter 3

Methods

Approach and rationale

The primary aim is to "document and describe" (Marshall & Rossman, 2011, p. 69) liberal education in liberal arts colleges in the 21st century. To accomplish this aim, the primary method of inquiry is document analysis using a descriptive design to build two analyst-constructed typologies of liberal arts education. Marshall and Rossman (2011) describe an analyst-constructed typology as "grounded in the data but not necessarily used explicitly by participants" (p. 215). Patton (2002) defines this task as an inductive exercise of analyzing preexisting data in order to "construct a typology to further elucidate findings" (p. 459). One can see, particularly with Patton's (2002) definition, how analyst-constructed typologies align with pragmatist frameworks outlined in the theoretical framework section. As such, I am primarily studying online data to understand the institutional components comprising liberal education through an inductive qualitative paradigm. One way to do this is to conduct an exemplar case study by examining these colleges with the singular purpose of liberal education. This approach is discussed in greater detail below in the overview of the data analysis procedures section.

The first typology is referred to as ***conceptual typology*** and describes the idealized version of liberal education found in the literature on liberal education. The second typology, referred to as ***practical typology***, is constructed to describe institutional practices. I use the term practices to refer to components of liberal education that all students would experience during their education. Components of the practical typology include honor codes, data on faculty-student interactions, co- and extracurriculars, percentages of students living in on campus residential housing, and graduation requirements. These components are grounded in the literature and are a logical attempt (Patton, 2002; Kimball, 1995) to assimilate various institutional practices in order to understand liberal education. As noted above, the two typologies stem from the pragmatic theoretical framework, which requires examining both the conceptual and practical elements to understand a phenomenon. By focusing exclusively on liberal arts colleges, I am able to ensure that the conceptual and practical components align given Breneman's (1994) claim that these schools have single-purpose missions to liberal arts education.

These typologies offer an accurate description of liberal education because the schools in the sample are "single-purpose institutions, with no rationale for existence beyond their capacity to educate undergraduate students" (Breneman, 1994, p. 4) in the liberal arts tradition. In contrast, if studying liberal education at "multipurpose institutions," then one would need to control for other institutional activities that do not constitute liberal education. Such practices and components could be "large-scale research, graduate or professional education, or public service" (p. 4). Thus, this study does not take into account all institutions that claim to offer an undergraduate liberal arts education. By examining liberal arts colleges there is no need to control for "competing

activities" (p. 4). These schools focus on offering liberal arts education in its purest, most distilled form. As aforementioned, when examining liberal arts colleges, one is inherently and inescapably examining liberal arts education. Such is not necessarily the case at other institutions with competing activities and missions. Given these parameters, this research represents an exemplar case study that looks at the essence of liberal education in liberal arts colleges. In other words by limiting the purview of this study to these institutions, I am able to capture data in these highly concentrated institutional contexts.

This study focuses on describing the alignment of idealized conceptual values (e.g. statements from the literature and institution "about" websites) and practices (e.g. faculty-student interactions, graduation requirements). Because this description aims to bridge across a group of institutions, the main strategy for coherence is a case-by-case study of liberal arts colleges in the United States. The case-by-case structure and the broader typologies reflect the theoretical frameworks of this paper. The case-by-case analysis is essentially documenting the components that comprise the symbolic framework (Bolman & Deal, 2008) of liberal arts education at each institution. I use the pragmatist lens to posit the broader picture of liberal education using the case-by-case findings and to see if and what trends exist across these institutions. This approach, accordingly, allows me to answer the primary research question – to what degree do liberal arts colleges have shared, cross-institutional components that comprise liberal education?

I use a constructivist perspective for this paper because it best reflects the historical context of the liberal arts found in Kimball (1995), Oakley (1992), and Delbanco (2012). The constructivist perspective also is primarily that of a pragmatist

perspective, where both emphasize the examination of multiple components to build understanding of phenomenon. This perspective posits that a liberal arts college functions within an assumed, constructed norm shared by most colleges in the sample: private, residential, comparatively small, and primarily interested in the liberal arts education heritage. Furthermore, the constructivist perspective assumes that the liberal arts education is a shared, common experience between faculty, students, and staff in a specific context (i.e. private, residential colleges). This approach remains the ideal methodological approach for comparing multiple institutions because it allows me to determine any shared (i.e. constructed) elements of liberal education.

Sampling strategy

This study updates the 137-sample set of institutions from Baker et al. (2012), which is itself an updated list from Breneman's (1994) study. In *Liberal Arts Colleges*, Breneman (1994) analyzes 212 colleges that meet his criteria for constituting a liberal arts college. Breneman initially used criterion sampling to select the 540 institutions identified as liberal arts colleges I and II. However, he found some of these schools no longer focused solely or even predominantly on liberal arts education, and therefore had to specify his criterion beyond Carnegie classification.

To do so, Breneman excluded "liberal arts plus" colleges that operate essentially as small comprehensive universities (e.g. Drew University, Willamette University) as well as "liberal arts minus" colleges that are closer to being small professional schools. Concerning the former group, Breneman examined how many non-bachelor degrees were offered by that particular school and eliminated any that offered two or more graduate degrees (e.g. Willamette University had law and MBA programs as of 1994, p. 12).

Concerning the latter group, Breneman eliminated any schools that offered fewer than 40% liberal arts degrees offered. Thus, Breneman narrowed the 540 institutions to 212. Baker et al. (2012) used the same criteria to reexamine Breneman's 212 and concluded that only 137 institutions still constituted liberal arts colleges. During data collection for the proposed study, I collect Carnegie classification of each school for two reasons. First, it ensures the sample set being used maintains the criteria set forth by Breneman (1994) and Baker et al (2012). Second, the findings may indicate trends by classification type when examining commonalities from secondary research question findings. This issue is discussed in greater detail below in the practical typology sections.

Researcher as instrument

Having two parents who have worked in liberal arts colleges in various capacities, I was told that a liberal arts education was the best education from a young age. To no surprise, my collegiate preference in high school was for a liberal arts educational experience. Subsequently, after visiting multiple colleges, I applied only to Sewanee: the University of the South because of the readily accessible hiking trails (the school's campus is over 13,000 acres of forest) and small class sizes. To this day, I thoroughly appreciate my time at Sewanee and could not imagine having attended any other institution.

My partner, multiple friends, and two younger cousins also graduated from Sewanee. To date, friends and family members have worked or currently work in some of the institutions on this list. I have worked in higher education in various capacities both full- and part-time since 1997 either as a student, an employee, or both simultaneously. Despite this length of association, I cannot readily figure out what constitutes liberal arts

education in practice, and the literature does not offer concrete answers. Procedures to address trustworthiness and credibility, and mitigate biases from these experiences are discussed below in the methods section.

Members of my dissertation committee also have direct affiliations with some of the schools in the sample set. Dr. David Breneman, chair of my dissertation committee, was president of Kalamazoo College from 1983-1989. Dr. Jo Ellen Parker served as President of Sweet Briar College and has spent a career working with liberal arts colleges during her time as Executive Director of the National Institute for Technology and Liberal Education as well as President of the Great Lakes College Association, a consortium of 12 liberal arts colleges. Additionally, Dr. Nancy Deutsch attended Vassar College, and Dr. Josipa Roksa attended Mount Holyoke College.

Ethical and political considerations

Because the primary data used in this study are public, the ethical implications are relatively non-existent. However, there are political implications to consider. First and foremost, this study does not take into account schools that self-identify as being a liberal arts college or offering a liberal education. It is unknown if a school would want to be acknowledged as part of the sample set built on the research from Breneman (1994) and Baker et al. (2012). It is also unclear if a school currently in this study would not want to be associated with the other institutions in the sample. That being said, the rubric for analysis of case-by-case study and the analyst-constructed typologies could be readily applied to institutions beyond the sample-set.

Data collection.

This paper relies heavily on Internet sources for data from college websites, IPEDS, U-CAN (University and College Accountability Network) and Carnegie Classifications. IPEDS and Carnegie Classifications sources provide data for faculty-student ratios. Sources specific to college websites include institutional "about" websites, degree requirements, general education (also known as general distribution) requirements, admission sites, and college catalogs. These data sources are free and available to the public. While this data collection requires document analysis of many websites, the rubric outlined below is a necessary tool to collect, organize, and analyze the data.

Transactional validity through member checking occurs through an online survey that necessitated IRB approval. Presidents and chief academic officer of liberal arts colleges in the sample set were e-mailed information about the study and a link to a short survey. In the survey, the first page details the study and the IRB approval information. On the second page, the following seven questions comprised the main portion of the survey:

1) Name of institution where you attended as an undergraduate (please no abbreviations)
2) The following components were most commonly represented in the analysis of liberal arts college webpages. Based on your experience and knowledge, please rank these components in order of importance in the practice of liberal education:
    - Engagement with faculty and staff (e.g. small classes, low faculty-student ratios, frequent interactions, etc...) _____
    - Collaboration and commitment within the campus community _____
    - Co- or extra-curriculars _____
    - Students taking classes in specific disciplines _____
    - Students taking classes centered around a theme (e.g. quantitative reasoning) or topic (e.g. diversity) _____
    - Presence of an honor code or other formalized academic and/or social integrity statement(s) _____
    - A commitment to student residential life on campus _____
3) Based on your experience and knowledge, please state any aspects or components essential to liberal education not mentioned in the list above.

4) What, if anything, is distinctive about community at liberal arts colleges?
5) What distinguishes liberal education at a liberal arts college from other schools claiming to operate in that tradition?
6) One of the drivers of this research is about how liberal education is provided today in higher education. From your experience and knowledge, what is most important about liberal arts colleges today?
7) Additional comments/suggestions:

The final page thanked the respondents for their participation. Through this online survey, presidents and deans from liberal arts colleges will be able to validate or invalidate the findings of this study (Marshall and Rossman, 2011, p. 41).

This survey was sent to the president and chief academic officer of each institution in the sample. A copy of the survey, all communications with participants, and the IRB information may be found in appendix E. In total, 206 individuals were sent the survey. Five e-mail addresses bounced back as inactive, so only 201 received the survey. With a 36% response rate, 73 responded. One survey response was discarded as it was a duplicate of another response by the same individual. Another survey response was discarded because it contained answers indicating that the participant did not adequately understand the survey. These results, therefore, are of the 71 responses. Twenty-nine presidents and 42 chief academic officers responded. I received responses from both president and chief academic officer from 13 institutions. Codes used for analysis were the same as those used in the findings to the secondary research questions.

It should be noted that transactional validity is one method among many that builds credibility and thus does not require reaching a certain threshold of responses. This element of the study seeks to support and empower practitioners to consider liberal arts colleges and liberal arts education collectively across institutions. This empowerment addresses Ferrall's (2011) concern that these schools are not collaborating enough due in

part to traditionally high autonomy. Thus transactional validity satisfies, at least in part, action research insofar as practitioners are afforded the opportunity to respond to this study, respond to the survey, and have any trends and similarities reported out at the conclusion of the study (Marshall and Rossman, 2011, p. 69).

During data collection, I discovered a limitation of collecting data from online resources. Namely, how important it is to know and have the appropriate terms by which to search. For example, there is considerable variation between institutions when searching for a position that could be described as the chief academic officer. Some schools have Provosts, while other schools have Deans of the College or Vice President of something to do with academics. In some cases, the Provost's title also included Dean of the College, whereas others did not. Likewise, many schools that lacked honor codes had academic integrity statements, despite the two being identical in language and purpose. The point to be made is that both the heterogeneous nature of institutional websites and differences in institutional language complicated data collection in targeted ways. About pages and graduation requirements, however, were relatively easy to obtain. The former was present in almost every single institution page, and the latter could be found readily in a school's catalog (e.g. academic catalog, course catalog, college catalog, etc…).

Data analysis procedures

Overview.

This study utilizes both deductive and inductive analysis (Marshall & Rossman, 2011, p. 214). First, I deduce the conceptual typology from sources noted in the literature review, including current and historical precedencies. Largely uniform throughout the

literature, the conceptual typology establishes a broad framework of the goals of liberal education. This framework, in turn, is compared with the practical typology. During the second phase of data analysis, I examine specific institutional practices that could be logically ascribed to the practice of liberal education. This inductive approach means I am not making claims to the value or outcomes of liberal education or liberal arts colleges. Instead, it is trying to provide an evidenced-based foundation on which to build an understanding of liberal education specifically in the context of liberal arts colleges.

After data on institutional components are gathered from the online data, the practical typology is inductively constructed from the aggregate findings. This typology aggregates the findings of the secondary research questions, such as common themes of honor codes in relation to liberal arts education, the most common graduation requirements, and the range of faculty-student ratios. I then use these two typologies to establish a pragmatist understanding of liberal arts education, both in theory and in practice.

Conceptual typology.

The following ideal student outcomes and pedagogical components are grounded in the aforementioned lists outlined in the literature review above (Delbanco, 2012; Ferrall, 2011; Kimball, 1995; Oakley, 1992). I place these aspects in the conceptual typology because it is an idealized version of liberal education. It should be noted that these values are not in order of importance and tend to be interrelated as opposed to discrete values. According to the literature, a student of liberal arts education ideally embodies these traits:

1. Civility and empathy towards others, including those persons of different cultures and ideologies,

2. Critical analysis,
3. Clear, mature, and thoughtful articulation, both oral and written,
4. A love of learning that drives creativity, imagination, and intellectual exploration,
5. A commitment to service and community,
6. Rationality and skepticism,
7. Autonomy in light of ambiguity and complexity.

This list constitutes the conceptual typology of liberal arts education because when liberal arts education operates at its finest, these are the ideal outcomes. Using pragmatic rationality, these ideals are associated with institutional descriptors noted in the literature review. For example, #1, 5 may logically be associated with honor codes and community as a means to instill the importance of community. Similarly, #2, 3, 4, 5, 6, 7 may be associated with close faculty-student interactions, where faculty discuss knowledge with students in and outside the classroom rather than having the majority of interactions be classroom and lecture-based. As a conceptual typology, these are ideals to be held that frame practice, whereas the practical typology helps verify the reality of these ideals as well as how these ideals are actualized in practice.

One furthermore sees historical precedents. For example, the philosophical (#2, 4, 6) and oratorical (#3) traditions (Kimball, 1995) still operate centuries later in the literature. The combination of both the individual-focus from the liberal-free ideal (#2, 4, 6, 7) as well as the civic responsibility present in Ancient Greek and Roman thought (#1, 5) are still prevalent (Kimball, 1995).

Practical typology.

Practices.

The components of the practical typology pertain to the presence of a school honor code, graduation requirements, faculty-student numbers, residential living, and co-/extracurriculars. These components have been selected using the pragmatist method of

constructing logical frameworks. I have selected to study these aspects because every student must experience these components to graduate. In other words, a student must sign an honor code or make a pledge to it in some way. Likewise, a student must satisfy graduate requirements, and do so by interacting with faculty members.

The examination of honor codes in liberal arts colleges, pertaining to the first secondary research question of the common themes of honor codes associated with liberal arts education, is important to note because advocates of liberal arts education frequently associate with cultivating ethical character or engaging in moral development, such as Delbanco (2012) and Ferrall (2011). Additionally, Kimball (1995) notes the historical precedence for associating liberal arts education with ethical development. This association is closely aligned with the emphasis of individuals living in communities, and this emphasis remains an essential aspect of the argument that states liberal arts education is requisite for the flourishing of democracy. Honor codes are analyzed using the conceptual typology as the basis for initial codes. Any emergent codes are discussed in the findings section. This research inquires whether there is a formal commitment to living ethically and honorably exists within a community.

The following secondary research question on required education experiences stems from the pragmatist theoretical framework. While honor code and community are important for understanding context, examining education requirements that all students must meet to graduate establishes a concrete foundation to the practice of liberal arts education. It is the foundation of the second typology.

The secondary research questions on faculty-student numbers, residential living, and co-/extracurriculars originate from two sources. First, Oakley's description of the

"dialectical space" (1992, p. 165) would, utilizing the pragmatist theoretical framework, logically involve high interaction and socialization between faculty and students. The second source is personally anecdotal. In conversation with one liberal arts college president, I described my dissertation idea and posed the question of what constituted liberal arts education. The president responded that it existed in "the intricacies of the community." I initially dismissed this comment as a fine development pitch that lacked concrete substance. Upon later reflection, subsequent conversations, and the myriad articles on MOOCs (massive open online classes), I would argue now that the phrase carries significant substance and warrants further consideration. It could be synonymous with what Scott Newstok (2013) terms "close learning." Therefore, the question about faculty-student data reflects the idea that education at its best is an active, close experience. It should be noted that all student numbers are undergraduate students as some schools in the sample offer graduate programs. These graduate programs are relatively small, as reflected in the Carnegie Classification. All faculty numbers are in FTE as listed by the National Center for Education Statistics' IPEDS database.

"About" website analysis.

Initially, mission statements were going to be used as a means of further studying liberal arts education, particularly as it relates to the conceptual typology. This plan, however, was ultimately discarded because research indicates the generic and even conflated nature of mission statements, both for liberal arts colleges and postsecondary institutions in general (Morphew & Hartley, 2006; Clifton, 2003; Delucci, 1997). Instead, institutional "about" pages are studied to examine how a school presents its liberal arts education in describing the institution itself. Any associated pages or information

referenced in these descriptions are noted and explored. Like the honor codes noted above, the conceptual typology is the initial list for codes. Emergent codes are noted in the findings section.

Liberal arts vs. vocational degrees awarded percentages.

Liberal education is frequently defined by disciplines identified as the liberal arts. Given this history, one would logically examine the percentages of liberal arts and vocational degrees awarded per institution. In updating Breneman's (1994) study, Baker et al. (2012) examine the percentages of degrees awarded. As noted in the sampling strategy above, this shift accounts for the primary reason that Baker et al.'s sample size is so much smaller than Breneman's. For the purposes of this study and in line with traditional definitions, Carnegie classification are included in the institution-by-institution rubric, but does not constitute a separate research question such as the points above.

I propose following the guidelines noted above in the studies by Baker et al (2012) and Breneman (1994). First, the 40% rule dictates that institutions that award less than 40% liberal arts degrees are noted and removed from the sample. The Carnegie classification differentiates between arts and sciences and vocational disciplines through sorting programs by the United States' Department of Education's classification of instructional programs (CIP). Likewise, schools that have developed substantial graduate programs are noted and removed. For example, schools with a classification of A&S-F/SGC do not qualify as the school offers graduate degrees in up to half of undergraduate majors offered (Carnegie classification, 2013). Given that Baker et al (2012) is a recent study, it is unlikely to see a substantial change in sample size. To that end, the following Carnegie classifications (2013) satisfy these two rules:

1) A&S-F/NGC: arts and science focus, no graduate coexistence: At least 80 percent of bachelor's degree majors were in the arts and sciences, and no graduate degrees were awarded in fields corresponding to undergraduate majors.
2) A&S+Prof/NGC: arts & sciences plus professions, no graduate coexistence: 60–79 percent of bachelor's degree majors were in the arts and sciences, and no graduate degrees were awarded in fields corresponding to undergraduate majors.
3) Bal/NGC: Balanced arts & sciences/professions, no graduate coexistence: bachelor's degrees awarded were relatively balanced between arts and sciences and professional fields (41–59 percent in each), and no graduate degrees were awarded in fields corresponding to undergraduate majors.

Given these parameters, 34 schools were eliminated from Baker et al's sample given transitions to professional schools or comprehensive schools. Schools were eliminated if they carried any of the following Carnegie Classifications: A&S+Prof/SGC, A&S-F/SGC, Prof+A&S/NGC, Bal/SGC, and A&S-F/HGC.

Institution-by-institution rubric.

Broadly, the following rubric is constructed for case-by-case analysis of each institution:

Sample institutional rubric

Institution name	Carnegie classification	Selectivity	State	Region	Religious affiliation	Founding year
Sample institution	A&S-F/NGC	More selective	WI	MW	n/a	1846

Institution name	Honor code	Graduation requirements	"About" website	Other
Sample institution	1) Academic and social focus 2) Does not	1) Mixed general education 2) Physical	1) Close learning 2) Civic engage	Note on unexpected findings

	mention liberal education	education 3) Senior project	ment	

Institution name	Faculty-student ratios	Faculty full-time raw numbers	Faculty part-time raw numbers	% of FT faculty	Student raw numbers
Sample institution	3) 14:1	4) 100	16	86.21%	1379

Institution name	Class size: 2-19	Class size:20-39	Class size: 40-99	Class size: 100+	Total	% living on campus
Sample institution	183	123	0	0	306	96

Each institution is examined using this rubric (here separated for page width), which allows for analysis both on an individual basis as well as notation on any cross-institutional trends. This rubric organizes the data in such a way as that makes considering the alignment with the conceptual typology possible. In short, the conceptual typology summarizes the idealized version of liberal education, whereas the practical typology establishes if there are any shared, cross-institutional practices. Using the pragmatist approach, both typologies then describe liberal education in liberal arts colleges.

Once all the data was collected, I coded each column of qualitative data to determine prevalent themes and similarities as noted in the findings chapter. For columns of quantitative data, I created ranges, means, and totals as noted in the findings chapter. Often, the qualitative data contextualized the quantitative data. For example, the emphasis on community through frequent student-faculty and student-staff interactions explained the purpose behind the ratios and numbers of faculty, class sizes, and

residential living. The coded data provided the means for examining the cross-institutional or common practical components of liberal education.

Summary.

The first part of this study summarizes the shared articulated aspects of liberal education through the conceptual typology, while the second part examines and constructs the practical typology of institutional practices. Finally, the third part uses the constructed typologies to describe the state of liberal arts education, thus answering the primary research question.

To be clear, this study does not constitute an Internet ethnography because the focus is neither on social media interactions nor what occurs on the Internet. However, this study engages some ethnographic methodologies, such as a multi-layered analysis of these schools, which is essential in describing and documenting what might constitute liberal education. This study is also not grounded theory insofar as it remains to be seen if there would be enough commonalities to constitute grounded theory.

The data in this study are freely accessible by anyone with a computer and an Internet connection, and therefore do not require institutional coding or institutional IRB approval. However, the survey of deans and presidents, outlined below, required IRB approval, the details of which are found in Appendix E. Despite being a common practice in higher education research, institutional coding would impair transparency and compromise the ability to fill the liberal arts research gap. It would also hinder this study's ability to address some of the research and action suggestions proposed by Ferrall (2011).

Procedures to address trustworthiness and credibility

The primary means of analysis is document analysis of public, online data. Data triangulation and transactional validity is used to verify the findings. Because these data are public, anyone may challenge or verify the findings. Comparing the two typologies is one form of data triangulation between practices and articulated values. Any shared common practices that arise in the construction of the practical typology may necessitate a secondary literature review for further data triangulation. This secondary literature may verify the effectiveness of practices; for example, educational benefits of required community service projects or high contact (i.e. community) educational experiences resulting from low faculty-student ratios.

To build credibility, I engaged in reflexivity, offer rich data from the findings, and provide data triangulation and transactional validity. Because data collection is solely online, prolonged engagement in the field may not be met because I will not be visiting each institution. To address this credibility issue, each institution was given an opportunity to respond to this study through transactional validity. This approach also allows this study to take into account any disconfirming evidence brought forth through transactional validity, a research procedure recommended by Patton (2002) to validate analyst-constructed typologies (p. 459-60).

Limitations

One limitation to this study is that it does not take into account the entirety of opportunities available to students. The schools in the sample may have multiple cocurriculars, service opportunities, courses, or faculty promoting liberal education that may not be required. While these opportunities may be important for the student experience, this study does not examine them because there is no guarantee that a student

will participate in or experience such opportunities. The focus on required components also improves the practicality of the study.

If conducting more specific case studies or institutional ethnographies, exploration of non-required components such as cocurriculars would occur. In order to study 103 institutions, document analysis of required components remains the best option. Therefore, a second limitation is that using document analysis may complicate my ability to obtain an accurate description of these institutions' curricular and pedagogic practices. Document analysis also allows for the qualitative examination across multiple institutions. That said, this benefit outweighs these limitations.

A limitation to the transactional validity method is a potential low response rate, which would compromise the ability to use the survey for supporting the study's credibility. Yet because of advances in technology, there is no reason not to offer deans and presidents of liberal arts colleges in the sample a chance to respond, validate the findings of this study, and track any emergent trends. Of note, however, will be that the respondents may be biased in their responses based on their professional careers and educational background. To address the concern of a low response rate, this part of the study was not a required element (i.e. this study does not depend on responses), but merely one methodological tool among many to improve reliability of findings as designated by Marshall and Rossman (2010).

Additionally, there is a limitation inherent to the sample set criteria. By utilizing the same criteria as Breneman (1994) and Baker et al (2012), I using literature to determine which colleges could be categorized as liberal arts colleges. I use Breneman's criteria for the sample in part because I am not interested in determining what does or

does not make a liberal arts college. I also use these criteria because it is more methodologically sound to explore liberal education at colleges that do not do anything else. The limitation to this approach, therefore, is that I do not examine the many other institutions committed to liberal education.

Chapter 4

Findings

Overview

The goal of this study is to answer the primary research question: to what degree do liberal arts colleges have shared, cross-institutional components that comprise liberal education? Answering this question provides a data-driven view of liberal education as practiced in these schools during the early 21st century. To answer this question, the chapter is arranged in four parts. The first two sections, curriculum and community respectively, explain the findings of the secondary research questions. When it comes to the practice of liberal education, one or both of these topics exists in all of the findings. The third section details the data from the survey and its relation to the findings on curriculum and community. Finally, a summary of the findings concludes this chapter.

The findings indicate curriculum and community to be the two main components of the practice of liberal education. First, it involves the curriculum by which students learn from various disciplines, perspectives, traditions, and skills both in and outside the classroom. Second, and by far more prevalent in the data, liberal education involves a strong sense of community described as involving student interaction and socialization with faculty and, by nature of these small, residential campuses, staff. In other words, liberal education as practiced in liberal arts colleges offers students a mentor-based education of high contact with experts (i.e. faculty and staff) in various disciplines, perspectives, and traditions.

Based on the findings, it appears that community informs the curriculum's breadth and depth by allowing students to have an extremely high amount of access to faculty and staff. It is, therefore, not merely exposing students to different disciplines, perspectives, and traditions. Students could take an autodidactic approach and do so on their own from travelling, perusing the Internet, reading books, and watching videos. Close guidance from faculty and staff during such exposure and exploration remains the essential component to how these institutions practice liberal education. Curriculum influences the community component not just through student's access to faculty and staff with expertise from a wide range of disciplines and not just faculty in the department of one's major. It also represents a means by which students think, learn, and reflect on issues related to living in community such as diversity, otherness, and exposure to different cultures.

Overall, I found data that challenge two conventions of liberal education. First, 60 institutions of the sample constructed general education completely or partially around themes instead of disciplines. These findings represent a departure from finding liberal education's value in the strictly curricular and traditional definitions of the liberal arts and sciences. This evidence contradicts the value-in-the-discipline thinking that is still commonplace today as evidenced in association publications (e.g. Wood & Toscano, 2013) and articles written by liberal arts college presidents (e.g. Nelson, 2014). Second, community was found to be the most salient trait across these institutions. As I will argue, community and mentorship rests at the core of the practice of liberal education. These findings indicate a departure from the strictly curricular definition of liberal education and as such offer a more nuanced construction of the term "liberal education."

Curriculum

The findings present a complex picture of the liberal education curriculum, defined here as both the general education and any other curricular requirements. In terms of general education, the findings can be divided into four categories: (1) open curriculums constructed at the discretion of students and advisors, (2) thematic-based curricular guidelines, (3) thematic-discipline mixed curricular guidelines, and (4) discipline-specific curricular guidelines. The first three categories represent liberal education conceived as a plurality or diversity of perspectives instead of a specific set of disciplines in the liberal arts and sciences. While such a position does not preclude a student learning from disciplines traditionally associated with liberal education, it does indicate that vocational or pre-professional disciplines should not necessarily be excluded when exposing a student to a variety of disciplines and multiple, even contrasting, modes of thinking. After all, it may be antithetical to the idea of the breadth component, discussed in greater detail below, of liberal education to prematurely exclude certain disciplines like business or nursing.

Residency policies and graduation requirements comprise the data on required educational experiences (the second secondary research question). Here, findings on a school's general education and general distribution define required educational experiences, whereas a school's policy constitutes the residency policy. The data for this research question comes solely from institutional websites and institutional documents such as course catalogs, college catalogs, and student handbooks. It should be noted that some graduation requirements not listed in a catalog or a web page might be missing due to the limitation of online data collection. The presentation of the findings on curriculum is divided into two sections: general education and other curricular requirements.

General education.

Codes for the data on the distribution of the general education were divided into thematic, discipline, mixed, and open. The curricular findings on the distribution for general education are as follows: 34 institutions have a general education structured around select themes. An emphasis on international or non-Western perspectives and living together in community are examples of shared traits that existed between institutions on particular themes. Themes are defined as broad based descriptions of the goal and as such could be fulfilled from a variety of disciplines. Sample themes from the findings include "modeling & analysis," "ethics & values," "cultures in comparison," and "textual cultures and analysis." These themes represent how faculty at these institutions frame the purpose of coursework in liberal education. For example, Sewanee frames the themes as learning objectives. The faculty define the third objective, "seeking meaning: wisdom, truth, and inquiry" as,

> The quest to answer fundamental questions of human existence has always been central to living the examined life. Through this learning objective, students examine how people in diverse times and places have addressed basic human questions about the meaning of life, the source of moral value, the nature of reality and possibility of transcendence, and to what or whom persons owe their ultimate allegiance. Courses that explore texts and traditions dedicated to philosophic questions and ethical inquiry, or that examine religious belief and practice as a pervasive expression of human culture, encourage students to develop a deeper understanding of what it means to be human (Sewanee, 2015).

Likewise, Hobart and William Smith Colleges outlines "eight educative goals" for students in their curricular studies. The eighth goal calls for "an intellectually grounded foundation for ethical judgment and action," which the faculty define as,

> An intellectually grounded foundation for ethical judgment and action derives from a deep, historically informed examination of the beliefs and values deeply embedded in our views and experience. Courses that examine values, ethics, social action, social policy, social justice, and the responsibilities of citizens in

contemporary society address this goal. Students will generally address this goal through a combination of courses (Hobart and William Smith Colleges, 2015).

The curricula of 32 institutions are discipline-structured and include general education with specific disciplines such as religion or philosophy as well as distribution requirements across the humanities-social science-natural science spectrum. As an example of the latter, Allegheny College, Hartwick College, and Kenyon College require students to take classes in arts & humanities, social & behavioral sciences, and physical & life sciences. Hope College is an example of having both types of requirements. Students there must take specific disciplines (e.g. six credits in religious studies) as well as broader fields (e.g. six credits in social sciences).

Types of general education curricula

Thematic	34
Disciplinary	32
Disciplinary-thematic mixed	26
Open	5
N/a	6

26 institutions carry a mixture of both thematic and discipline requirements. For example, Bowdoin College has thematic requirements for general distribution such as "exploring social differences" and "international perspectives" in addition to distribution requirements across the humanities-social science-natural science spectrum. The faculty posit the two former themes in accordance with the goal that students "to be at home in all lands and ages" (Bowdoin College, 2015). The mixed curriculum at Bowdoin also allows students to satisfy multiple requirements with a single course.

The data on thematic curricula point to the complex topics that the faculty expect students to engage during their undergraduate years. In the example from Sewanee, one may see the big questions of life present, whereas in Hobart and William Smith one sees

the importance of thinking about one how interacts and lives with others in society. Relatedly, both highlight the importance of ethics and morals in the education of undergraduate students. The example from Bowdoin emphasizes the importance of students learning how to engage maturely and live with diversity and difference. The presence of Kimball's (1995) orators and philosophers may be found in the themes as well as within the themes emphasizing living in community, how to act, and what it means to be human.

Finally, five schools in the sample had open curricula. Such curricula allow the student to choose his or her coursework in consultation with a faculty advisor. At Earlham College, students satisfy the breadth component of their education through a general education program that spans the liberal arts and sciences. That said, the school's website explains, "Earlham's system of General Education allows as much student election of courses as is practical, and also invites faculty to introduce students to subjects of special interest and importance early in students' academic careers" (Earlham College, 2015). Students then have a considerable amount of autonomy in course selections. Some institutions, including Earlham as well as Amherst College and Concordia College, specify core-competencies like quantitative reasoning or written & oral expression or themes like "world cultures," "human thought & behavior." I decided to list these institutions as open curricula despite the existence of some thematic directions because the emphasis appears to be on a student choosing classes in consultation with her or his advisor and not the themes. Schools with thematic or mixed curricular, the emphasis appears to be on the themes and frequently define explicitly which courses satisfy thematic requirements.

Other educational requirements.

This category details the most prevalent catchall of requirements that fall outside the curricular distribution of a general education. Because this study is examining what is shared among these institutions, requirements that exist in only a very small number of institutions will not be explored in depth. Examples of such requirements are internships, chapel attendance, campus event attendance (e.g. plays, guest speakers), and community service. Codes for other curricular requirements are as follows: first-seminars (including foundation courses), culminating projects (including senior capstones, examinations, research projects), writing competency (including rhetoric when appropriate, English composition, academic writing, writing intensive), oral competency (including rhetoric when appropriate), quantitative competency (including logic), foreign language (including non-Western perspective, cultural diversity), and physical education (including health and wellness).

Educational requirements

Foreign language (including non-western perspective/cultural diversity)	72
Writing competency	67
First-year program(s)	56
Physical education	49
Culminating project	35
Quantitative competency	33
Oral competency	13

Of note, some institutions include these facets as part of the breadth of the general education and depth of one's major. The reader, therefore, should not interpret these sections as necessarily two discrete sets of requirements or even data points but instead as an organized way to present the data. Indeed students fulfill many of these requirements

through the general education distribution or major requirements. For example, a student might fulfill a quantitative competency requirement through taking a required mathematics class. Or, a student might fulfill a diversity or non-Western perspective requirement through learning a second language. These requirements, it should be noted, are in addition to one's major. One's major, the depth component of breadth and depth, was found to be uniform across institutions in the sample but did not contain any variation as basic major guidelines typically align with accreditation policies. Facets of fulfilling one's major, however, are noted in the requirements of a culminating project and/or examination as found at institutions such as Reed College (junior qualifying examination, senior thesis with oral examination) and Kalamazoo College (senior individualized project).

Of all curricular findings, the foreign language requirement remains the most pervasive. Seventy-two institutions require students to complete a foreign language or non-Western perspective requirement. The coding for foreign language includes non-Western perspective because many schools would attribute the purpose of learning a foreign language as a means to expose students to a non-Western perspective. Some schools, however, require both but did not necessarily indicate if a student could satisfy both when taking foreign language classes.

The second most prevalent finding in this category is that 56 institutions require students to take a first-year seminar. These seminars help acclimate first-year students to studying in the liberal education tradition as well as the academic demands of college life. Some institutions, like Augustana College's (Il) Liberal Studies First Year Program, have

multi-course sequences instead of a single seminar. This program asks students to examine questions the faculty posit as central to their work in liberal education:

> The fall course asks students to consider what it means to be a liberally educated individual. In the winter, students ponder how our exploration of the past deepens our understanding of the human condition. The spring course addresses how we can embrace the challenges of our diverse and changing world (Augustana, 2015).

The descriptors used for the purpose of a freshman seminar sound remarkably similar to those in the thematic examples above from Sewanee, Hobart and William Smith, and Bowdoin – namely what means to be human and what it means to live with others – in our world, society, and community.

In addition to foreign languages and first-year seminars, many schools emphasize developing specific skills typically emphasized in the beginning of a student's tenure. Sixty-seven institutions require students to complete at least one writing competency course or examination, whereas only 13 schools have a similar requirement for oral competency. The written and oral competency requirements speak to the lasting influence of the oratorical tradition in the practice of liberal education. Students educated in the liberal tradition then should not just be able to think and reflect on complex thoughts but also have the ability to communicate such to others with some degree of rhetorical training. Clearly the oral competency, the least common of all education requirements, is not surviving as well as the emphasis on the written word.

Frequently presented in concert with a written and, in fewer cases, oral requirements, 33 institutions require students to complete a quantitative competency, though this number is perhaps lower than it may actually be in reality. This particular requirement was difficult to track and 33 represents the number of institutions found to have explicitly emphasized a quantitative competency. That said, other schools as part of

a general distribution may require a course in mathematics. As an example of this, Claremont McKenna College requires students to take a course in mathematics/computer science. Such a requirement did not constitute a quantitative reasoning requirement as this code pertains to the requirements that explicitly stated the logic or reasoning component of quantitative methods. For example, Muhlenberg College requires students to a course in reasoning with a focus on "mathematical and/or logic reasoning" (Muhlenberg, 2015).

Furthermore, the number 33 may be misleading for while some schools do not specify a requirement in mathematics, that does not mean that students would not be exposed to mathematical reasoning in a natural sciences class or logic reasoning in a philosophy course. Given these factors, I do not think the quantitative competency may be attributed to the philosophical or oratorical traditions like the written and oral competencies. Further research remains needed, but an external explanation for such a requirement may be the recent emphasis on STEM-H (science, technology, engineering, mathematics, and health) education in academia as well as the prevalence of statistical analysis in the looming age of big data. All things considered, I attribute the quantitative reasoning to represent another facet of the breadth component and the idea that students should learn multiple methods of analysis through exposure to a plurality of perspectives even if it may be in response to the contemporary popularity of STEM-H.

Similar to these skills, 35 institutions require students to complete at least one culminating project in their senior year of study, and as noted above, this requirement pertains more so to the depth component of general education. The coding for this particular requirement signifies when institutions require students to complete a major

work of scholarship typically in their senior year. Comprehensive examinations, theses, and oral defenses or presentations are examples of such scholarship. A culminating project allows the faculty, typically in the student's major department, to assess how well the student can synthesize and articulate the skills and knowledge developed throughout the breadth and depth of general education. That said, only approximately 1/3 of institutions in the sample require such an assessment. This low number may result from some institutions having a similar assessment but do not list it as part of the general education. Because quantitative and oral competencies as well as culminating project requirements can be found in 1/3 or fewer institutions, I do not interpret these practices in and of themselves to be essential in the practice of liberal education. Instead, these requirements merely represent different facets of the breadth component of the general education/distribution.

49 institutions require students to complete some type of physical education requirement, be it through a course or cocurricular activity such as an intramural. This requirement represents the physical side when educating the whole person in liberal education. In recent years, many schools nationally have abandoned physical education requirements (Carlson, 2015), which may explain why slightly over 50% of the institutions in the sample do not have physical education requirements. Of course, schools in the sample have athletic programs and offer intramural sports as well as similar opportunities through co-/extra-curriculars. Arguably, instead of requiring for all students, physical education has been left to be a more self-directed endeavor similar to that of an open curriculum. That said, less than half of schools in the sample requiring physical education may also indicate that such a holistic interpretation of educating the

whole person has diminished or at least shifted, though further research would be needed. From such numbers I conclude that it may be important to the practice of liberal education but does not constitute a strong salient trait.

Community

In the findings so far, the importance of community has already been indicated by some of the requirements detailed in the curricular section such as the examples from Sewanee, Hobart and William Smith, and Bowdoin Colleges. Namely, some of the curricular requirements convey the importance of students thinking and reflecting about being part of a community. In this section, I address findings from the remaining secondary research questions and discuss their implications to the idea of community at these liberal arts colleges. During data collection, I discovered that the majority of findings pertained to or described community with descriptors involving small academic communities with frequent collaborations and interactions between students, faculty, and staff. In the survey findings detailed below, community represents the most common response by survey participants. In light of this evidence, community is the most salient trait to the practice of liberal education. Such an emphasis represents a slight departure from the literature that emphasizes the liberal arts and sciences disciplines as either the sole definition of liberal education or at least the most salient aspect. The role and importance of staff and their association with community represents one unexpected finding in this study. This role will be discussed in the relevant following sections.

The presentation of the findings on community is organized into five sections. The first section details findings on both honor codes and co-/extra-curriculars. Findings related to the faculty-student data and residential living follow respectively in the third

and fourth sections. Finally, the fifth section presents the findings of the institutional "about" pages.

Honor codes & co-/extra-curriculars.

The presence of an honor code (the first secondary research question) appears not to necessarily be directly related to or essential to liberal education as practiced at the institutions in the sample as less than half of the institutions in the sample have a formal honor code. 20 institutions have formal honor codes focusing on academics, whereas 20 other schools have formal honor codes with an academic and social focus. Thirteen institutions have formal policies specified as codes of conduct or academic integrity policies that focused on academics, whereas 10 institutions have similar policies with a combined focus on academic and social focus.

Forty institutions did not produce results when searching for terms such as "honor code," "academic integrity policy," and "code of conduct." These terms were also the codes used in analysis as regardless of title, the substance of these policies were largely the same in focusing on cheating, lying, & stealing. It seems unlikely that these schools lack formal policies on cheating or stealing, though these were not found. This absence may be attributed due to the limitation associated with online data collection and use of specific terms.

Honor code summary table

Honor code (academic focus)	20
Honor code (academic & social focus)	20
Academic integrity policy (academic focus)	12
Academic integrity policy (academic & social focus)	10
N/a	41

While 40 schools in the sample have honor codes, there appears to be a redundancy with regard to standard academic policies against plagiarism, cheating, and similar student offences. Data collection did not yield any explicit and substantive connection to the presence of an honor code with a commitment to or practice of liberal education. After all, such rules would exist regardless of whether or not a school operates in the liberal education tradition. These data do, however, indicate that 40 schools emphasize honorable living in a community setting on top of whatever policies would exist at any given school. Furthermore, 19 institutions mention the importance of honor in their institutional about pages. Overall, honor codes and their policy equivalents emphasize the importance of community and the location of the individual in community in their own of dictating social behaviors (i.e. do not lie, cheat, or steal) while co- and extra-curriculars offer structured ways for students to experience leadership in various capacities.

I expected to find more schools with honor codes. This expectation was likely a result of having attended an institution, Sewanee, with an honor code that is emphasized continuously throughout one's baccalaureate tenure. That said, I do not think honor codes should necessarily be attributed in any significant way to the practice of liberal arts education. Indeed in the survey of presidents and chief academic officers, 43 participants ranked the presence of an honor code or formalized academic and/or social integrity statement last in the list of institutional components presented. This number roughly corresponds to those institutions with formal honor codes. If a connection does exist, I was unable to discover it using these methods.

Similar to the findings on the honor code, the examination of co- and extracurriculars (the sixth secondary research question) did not yield significant data beyond these schools having opportunities for student engagement beyond the classroom. For this topic, I explored institution websites on co-/extra-curricular opportunities, though eventually abandoned data collection after I was unable to find any substantive data to analyze. Commonly such sites are found as part of the Dean of Students office and student life websites. While these institutions emphasized having many co- and extracurricular opportunities, it remains unclear whether or not to attribute this to liberal education. At least it seems likely to be a byproduct of these schools being highly residential. This question was the most difficult to research because the relatively generic nature of student groups across campuses: politically oriented groups, shared interest groups such as a film club or green living, fraternities and sororities, volunteer and community groups are all too common across institutions. These clubs offer leadership opportunities for students even though an explicit or direct connection to liberal education cannot necessarily be made. It can, however, be inferred when seeing leadership as common outcome associated with liberal education in the literature.

That said, data on honor codes, and co-/extracurriculars in combination of the high percentages of students living in residential housing all indicate one important finding. Namely some elements of liberal education are shifting beyond the purview of faculty, as these components are now more so the domain of student affairs professionals. This aspect may explain, at least in part, why connecting honor codes and co-/extra-curriculars with the practice of liberal education is difficult to discern.

Faculty-student data.

Data on faculty and student numbers (the third secondary research question) were obtained from the institutional webpages and institutional profiles on the Carnegie Classification system. A full list of faculty-student data may be found in appendix C. These schools have a student enrollment range of 294-3343. The mean enrollment is 1648, and only 14 institutions enroll fewer than 1,000 students. Concerning faculty, the majority of schools (84) in the sample have a faculty-student ratio above 10:1, whereas only 19 have between 6:1 and 9:1. 25 schools have a ratio of 10:1, 24 with 11:1, 19 with 12:1, 6 with 13:1, 7 with 14:1, and two with 15:1. Only four institutions have a percentage of full-time faculty beneath 50%. The number of full-time faculty outnumber those of part-time significantly, as evidenced by a mean percentage of 74% faculty being full-time.

Faculty-student data summary

Faculty-student numbers summary table	Minimum	Maximum	Mean
Faculty-Student Ratios	6	15	10.82
Faculty (full-time) Raw Numbers	28	346	142.641
Faculty (part-time) Raw Numbers	0	204	46.738
Percentage of full-time faculty	30.66%	100.00%	74.82%
Student Raw Numbers	294	3343	1648.068

Concerning classes, the vast majority of classes offered fell within a range of 2-19 students. The next most common class size fell between 20-39. This effectively means that the majority of classes are seminar or discussion-based courses. Only half of the sample even offered classes that had between 40-99 students. Sixteen institutions offered classes with over 200 students.

Class size data summary

	Total # of classes	Range of # of classes	Average # of classes
Class size: 2-19	21,976	108-513	271
Class size: 20-39	9,965	1-297	123
Class size: 40-99	716	0-34	9
Class size: 100+	27	0-4	.35
Total	32,684	135-1106	414

The high numbers of tenured or tenure-track faculty and the vast majority of classes offered at these institutions having enrollments with 19 or fewer students indicate one of the means by which students experience community at liberal arts colleges – namely, in small seminar or discussion classes with an expert in that field. The amount of attention that the instructor may devote to each student and each class can, accordingly, be assumed to be high given these two factors. Such numbers set the stage for students to experience education in a highly interactive and collaborative environment.

With regard to the practice of liberal education, I interpret these findings to have two significant contributions and one caveat. First, the data here point toward the smallness of the academic community at these schools. In terms of salient traits, it cannot be denied that smallness remains one of the most pervasive in the sample between institutions. Second, these numbers offer a quantitative representation of a highly interactive, collaborative learning environment when contextualized by the other qualitative data in this study. We can conclude then that with regard to the practice of liberal education, a close and engaging learning environment should be considered essential. A caveat, however, exists. Size and an engaging environment may indicate the practice of liberal education but do not necessarily give evidence to its quality. The

question of what effects on students may be discerned from these aspects is explored in chapter 5 using higher education research.

Residential living.

The University-College Accountability Network (U-CAN) provided data on class size and percentage of students living on campus. Only 75 institutions participate in U-CAN and 10 institutions had profiles noted as being "not updated." 18 institutions do not participate. Percentages of students living campus (the fifth secondary research question) is from U-CAN profile pages for the 85 participating institutions. A full list of class size and percentage of students living on campus data may be found in appendix D. The range for the percentages of students living on campus was 39-99% with a mean of 86.99. The second lowest housed 56% students on campus. Sixteen institutions have percentages between 61-79%, while 17 institutions have between 81-89% living in residential housing. Forty-five institutions, or just under half of the sample, have 90-99% living on campus. It is clear that the vast majority of these institutions are highly residential.

Residential living percentages

Range	39-99%
Mean	86.99%
# of institutions below 60.9%	2
# of institutions between 61-79%	16
# of institutions between 81-89%	17
# of institutions between 90-99%	45
# of institutions lacking data	5
# of non-U-CAN institutions	18

These findings offer one of the clearest pictures of the practice of liberal education at these institutions. Namely, students live in the environment in which they study and they study in the environment in which they live. The encompassing aspects of

liberal education, namely educating the whole person as well as cultivating the citizen, appear to be related to why a student would reside within the academic community itself. The idea of creating life long learners and educating the whole student does not cease the moment the student leaves the classroom. Instead, opportunities for learning, interaction, and informal conversation exist seemingly all the time as the student goes about his or her daily life on campus. Meals, classes, dormitories, and social spaces all become forums for students to interact with each other, faculty, staff, and locals. In other words, the community functions as an all-encompassing learning environment for an all-encompassing education.

It should be noted that some information on residential living is not made apparent through data collection. For example at Sewanee, student dormitories are resided over by matrons, or in rare instances patrons, who are usually students of the theology school. These individuals tend to be retired or semi-retired women that live in dorms and monitor student behavior, help care for sick students, and facilitate dorm meetings. In other words, the matrons represent an important facet of residential living on Sewanee not captured in my findings.

"About" pages.

Data on how schools articulate liberal education on institutional webpages (the fourth secondary research question) were collected from institutional "about" webpages and carried the greatest variety of all the secondary research question findings. There was also considerable range in terms of amount of information present in these "about" webpages. Some institutions have very detailed "about" pages, while others offer very

sparse ones. Codes for analyzing these websites aligned with aspects describing liberal education in the literature review.

Codes used were diverse world, leadership, educating the whole person, community-focus, individual-focus, honor, liberal arts disciplines, student opportunities, and typical liberal arts outcomes. Each code represents a facet that an institution described as being important or essential to education. 27 institutions mentioned diverse world, which included descriptions of global citizenship, global perspectives, diversity, or diverse environment. Seventeen institutions mentioned leadership. Twelve institutions described the importance of educating the whole person. This education usually involved developing specific aspects of the students in addition to intellectual growth such as moral, social, and spiritual development. Nineteen institutions held honor as an essential component with references to responsibility, ethical living, or social responsibility. Hampden-Sydney (2015) stated a strong commitment to honor and its role in their community:

> Honor is more than an ideal, it's a way of life, and it inspires everything we do at Hampden-Sydney. For more than two centuries, we've lived according to two basic statements that summarize what honorable behavior means to us.
> "The Hampden-Sydney student will behave as a gentleman at all times and in all places."
> "The Hampden-Sydney student will not lie, cheat, or steal, nor tolerate those who do."
> These principles guide the College's student-run justice system in creating a safe and dignified community.

Ten institutions referenced the importance of liberal arts disciplines. Ten listed typical liberal education outcomes in conjunction with their education including creativity, critical thinking, communication, and being thoughtful. For example, Carleton College's (2015) about page states, "The most important thing our students learn is how to learn for

a lifetime. Critical thinking, problem solving, creativity, effective communication: these are the tools that transform a collection of facts and figures into a way of understanding the world."

Twenty-four institutions referenced student opportunities with language such as pursuing personal interests and cocurricular opportunities. As one example that references multiples codes, Union College (2015) describes what their community offers in terms of not just opportunities but also diversity and engagement as well:

> Union's rigorous academics take place in a diverse, welcoming campus environment that supports your personal growth, provides you with a wealth of opportunities to find and pursue your passions, and inspires you to engage with the local and global community through meaningful projects and volunteer work.

The most robust finding for this category was in references for community with 61 institutions. These references involved language describing any of the following: close community, access to faculty, intimate culture, collaborative learning, deep learning, and small class sizes. As one example, Pitzer College's (2015) "about" explains, "We come together to live and work in a shared learning environment where every member is valued, respected, and entitled to dignity and honor founded upon the following rights and responsibilities."

Institutional webpage data

Community	61
Diverse world	27
Student opportunities	24
Honor	19
Leadership	17
Educating the whole person	12
Liberal arts disciplines	10
Learning education learning outcomes	10

With regard to the practice of liberal education, the institutional about pages confirm the emphasis on community. Given that the other codes range from less than 10% to less than 30% of institutions in the sample, I do not think any other significant conclusion can be found with these data on what constitutes a shared practice of liberal education. That said, the low number of about pages mentioning honor does align with the findings on honor codes and confirms that while it is important for a small number, a majority do not appear to find it similarly significant.

Survey findings

For purposes of data triangulation, the responses to this survey align well with the findings of the secondary research questions. Due to the homogeneity of responses and alignment with findings, follow-up procedures such as phone interviews were unnecessary. These findings confirm community to be the most important and shared institutional practice and that curriculum matters, though not as much as community. Even the nuances of community align – namely an academic community of around 1,000-3,000 students with frequent interactions and socialization appear to be the most significant aspect to community. Such data shed light on the interpretation and understanding of the faculty-student quantitative data as well as high percentages of students living in residential housing.

Question 1.

Regarding the first question (name of institution where you attended as an undergraduate (please no abbreviations)), 36 respondents attended baccalaureate-focused institutions, 4 attended universities with graduate programs, 24 attended research-intensive universities, 4 attended international universities, and 4 did not respond. While

this question does not pertain directly to the practice of liberal education, it did supply demographic data on participants. As such, we know that over half of the respondents attended schools either in the sample or similar institutions with focuses on undergraduate education.

Undergraduate institutions of survey participants

Baccalaureate institutions	36
Universities with some graduate programs	4
Research universities	24
International universities (non-US)	4
No response	4

Question 2.

For the second question, participants were given the following prompt: "The following components were most commonly represented in the analysis of liberal arts college webpages. Based on your experience and knowledge, please rank these components in order of importance in the practice of liberal education". The responses were as follows:

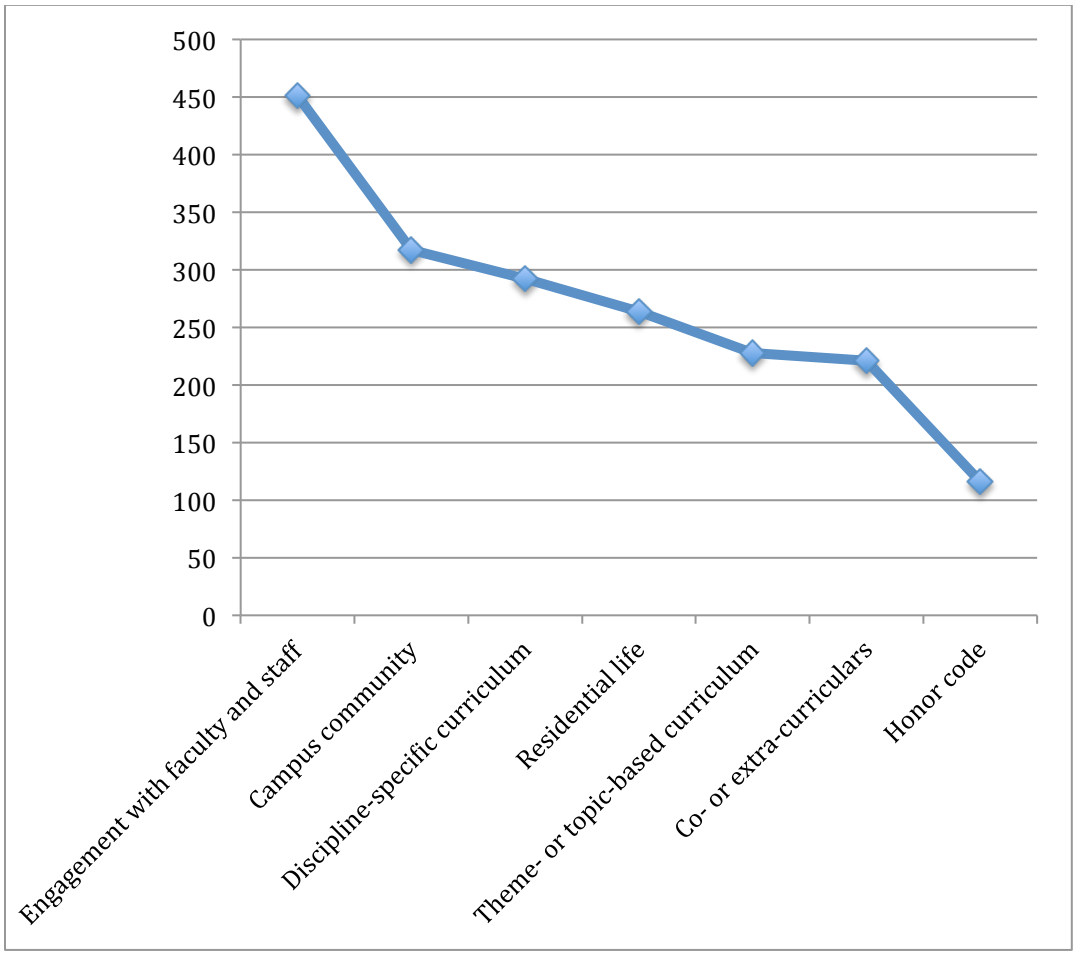
Institutional component ranking responses

	1	**2**	**3**	**4**	**5**	**6**	**7**
Engagement with faculty and staff (e.g. small classes, low faculty-student ratios, frequent interactions, etc...)	57	8	0	1	0	0	0
Collaboration and commitment within the campus community	2	17	12	10	17	8	0
Co- or extra-curriculars	0	1	13	20	12	14	6
Students taking classes in specific disciplines	7	16	14	6	13	4	6
Students taking classes centered around a theme (e.g. quantitative reasoning) or topic (e.g. diversity)	1	10	10	10	9	19	6
Presence of an honor code or other formalized academic and/or social integrity statement(s)	0	1	1	10	2	8	43
A commitment to student residential life on campus	0	14	16	9	12	12	4

To interpret the ranked data in terms of most shared emphasis, each component's

ranking scores were assigned a corresponding value to determine overall emphasis of each component. A number one ranking was worth 7 points, number two 6, number three 5, number four 4, number five 3, number six 2, and number seven 1. Engagement with faculty and staff received a total ranking value of 451 through the following calculation: (57*7)+(8*6)+(4*1)=451.

Ranked data sorted



I interpret engagement with faculty and staff to be another indicator of campus community, thus confirming that community matters the most to these institutions. It also confirms the lack of importance of an honor code. It may be that what the honor code represents in the literature review – ethical living, social development of the student –

should be considered more so than one facet of living in a close, highly engaged community. Curriculum matters, though it appears to be on par with other aspects of community – namely collaboration and commitment within the community, residential living, and to a lesser extent co-/extra-curriculars.

Question 3.

In question three, participants were asked to state any aspects of components not mentioned in the list above in question two. Twenty-five respondents noted that breadth and depth of study was an essential component, and as it related to the general education, the curriculum, or a range of curricular requirements of their schools. The following example typifies responses for this code: "Students taking courses across the curriculum (breadth), while also having a major (depth)." Distinguishing between a discipline-specific and a theme- or topic-based curriculum was not present, and this might explain the increased importance. It may also be that the specifics of the breadth component do not matter as much as it is to achieve any breadth of study. For example, this participant stated, "Breadth of exposure to multiple modes of inquiry. Early breadth, followed by specialization at a later stage of the college experience." Or, it may be that respondents assumed the breadth component to be associated with the liberal arts and sciences disciplines. While it is unclear which may be the case, the results from this question confirm curriculum as the second most important factor in the practice of liberal education.

Missing components from ranking question

Breadth and depth of study	25
Learning outcomes	18
Educating the whole person	9
N/a	6

With regard to the other results, 18 respondents mentioned learning outcomes, which was the second most common response. This response pertained to typical outcomes mentioned in the literature such as life long learning, critical thinking, critical reading, quantitative literacy, etc… as well as more conceptual, idealized learning outcomes. As an example of the former, one participated offered, "A commitment to broad knowledge. To understanding ways of knowing and the importance of problem solving and critical thinking. Life long learning and curiosity. Interdisciplinary connects and integration." As an example of the latter, one respondent stated,

> A clear statements [sic] of and commitment to the values of the liberal arts--intellectual vitality, responsibility for self and others, service to the common good, character and moral courage. In short--a clear, unswerving commitment to the development and empowerment of young people.

Of note, participants framed learning outcomes to be byproducts of the breadth and depth component, which makes sense given the increased emphasis on learning outcomes in accreditation reports as well as learning outcomes being associated with classroom instruction.

The remaining responses were more varied. Educating the whole person was the third most common response and occurred only 9 times, while no response was the fourth most common response at 6. One response was an outlier where the participant defined liberal education in curricular terms, and dismissed the components in question 1 as not related to the core of liberal education:

> I would say that virtually none of the factors above are essential to liberal education, which I define almost entirely within curricular boundaries and focused on broad attitudes towards learning that cut across disciplines. It's a focus on breadth and 'learning for learning's sake.' Liberal education can be practiced at many scales and at many types of institutions. So, most of the components given above are irrelevant in my view.

While such a position may be found in the literature, it dismisses the notion of considering what constitutes the practices of liberal education. Though noted, it does not address how different institution types or scale of school affect, if it all, liberal education. This thinking does not take into account substantive differences in missions as well as student experiences. After all, students in a 15-person seminar class fundamentally experience the classroom differently than a 200-student lecture hall.

Question 4.

Participants were then asked, "what, if anything, is distinctive about community at liberal arts colleges?" In most responses, participants emphasized both interactions between students, faculty, and staff (referenced 23 times) and being united as a community by a shared purpose (20). Most descriptors for the shared purpose component involved academics, learning, and engagement. The third most referenced trait was that learning occurs outside the classroom (12 times) in a residential setting (10). Seven participants noted the focus on the breadth of study and broadening students' perspectives and skills to be distinctive.

What is distinctive about community at LACs

Interactions	23
Shared purpose	20
Residential	10
24/7 learning	12
Breadth, broad perspectives/skills	7

These responses largely confirm what should be considered important about community and interactions. A participant summarized community as follows: "You know almost everyone. There is an emphasis on being a community of learners." Here, commonality or shared purpose is almost as important as interactions. This shared

purpose component may have something to do with these schools having single missions as opposed to multiple missions. While the residential and 24/7 learning aspects are secondary, the breadth component does not appear to be what is distinctive about community. Similar to responses to the 2nd survey question, this interpretation may result from respondents associating breadth with disciplines or classes and community represents either something more or something else. One respondent explicitly made the connection between community and the breadth component:

> Bear in mind that these are expressed in the optative mood: The value of surrounding oneself with a individuals who share similar beliefs about the value of education, of intellectual curiosity, of creativity, and of critical awareness of oneself and one's world. Put differently, the sense of shared intellectual purpose and engagement, the opportunity for shared and cross-fertilizing ideas, the operation of serendipity and spontaneity, the daily opportunity to be reminded of the limits of one's own supposed brilliance (and occasionally the opportunity to be confirmed in the value of one's supposed brilliance).

This response can be read as a best-case scenario. It also summarizes the idea of an engaged community of learning, to reference Oakley's (1992) title and the participant's response above. It also speaks to the idea that the practice of liberal education may need to function in a practice of continuously striving for these ideals, similar to the idea of preparing students to be life-long learners.

Question 5.

In response to question 5 – what distinguishes liberal arts colleges from other schools operating in liberal education tradition – 22 respondents noted the mentorship style of education. Nineteen mentioned the importance of size, while 13 mentioned the sole focus on undergraduate students. Both of these findings seem to point to this notion of a close community structured around frequent interactions. Ten respondents noted the singular commitment to the liberal education mission and its ability to meet this

commitment due to factors such as the small size, mostly tenure-track/tenured faculty, and residential community. Nine respondents mentioned the community/residential component to be what is distinctive. Other responses were more varied, and made coding a coherent theme difficult.

The idea of mentorship presented closely aligned with other components. For example, one participant stated,

> The skill and character development that typify a liberal arts education are not developed in large lecture halls with multiple-choice tests. It is not enough to just major in art history or philosophy or anthropology with a few general education requirements and say that is the kind of liberal education that will prepare tomorrow's leaders. This education—building skills and helping students to find and think for themselves—takes faculty who can focus on teaching in small classes with close mentoring. It requires writing and rewriting, reading and rereading, and challenging discussion and debate both inside and outside the classroom.

Another participant echoed similar sentiments, "The master-apprentice relationship. At colleges, one reads classic and contemporary texts with properly credentialed instructors in a small class environment wherein genuine dialogue/engagement is possible." As such, the interrelated nature of these components is important to keep in mind as one component defines and nuances other ones.

What distinguishes liberal arts colleges

Mentorship	22
Size	19
Student focus	13
Mission	10
Residential community	9

One participant took a contemporary definition and offered an outlier response: "'Liberal education' is a construct emerging from the AACU in part, I expect, in an effort to take the best practices of a liberal arts education and apply these wherever possible to

other kinds of learning environments." I disagree with this respondent as liberal education, both as a construct and a term itself, has historical roots deeper than the AACU. That said, the respondent correctly points out that the AACU advocates for liberal education.

Question 6.

Finally, in question six, participants were asked about what is most important about liberal arts colleges today. Thirty-eight participants responded with an emphasis on educating the whole person, directly or indirectly. This code included a focus on preparing citizens, community members, and cultivating the intellectual, emotional, social, and spiritual development of students. Eleven participants emphasized the importance of the interactions between students, faculty, and staff, while 7 noted the importance of being a small institution. Six mentioned the sole commitment to educating undergraduate students. The overwhelming focus on educating the whole person was frequently noted as being antipodal to educating students for specific jobs or careers. Indeed, one participant noted, "They provide intimate environments for student intellectual, social, and moral growth." Education, according to a another participant, represents a "[u]nique way to prepare student to grow in mind, body and spirit." These responses align with typical notions of educating the whole person, which involve a student finding themselves, exploring the world, learning about others, be it individuals or whole cultures, and maturing in how they relate with others.

From some responses to this question, I include another dimension of educating the whole person that falls outside the traditional definition. This dimension points out that the person of educating the whole person is contrary to a vocational or professional

education that holds only one purpose, a specific job. Connecting educating the whole person and a broad education is present in both survey responses and the literature (e.g. Nussbaum, 2012). One participant stated,

> [liberal arts colleges] are committed to educating the whole student; that they are committed to educating engaged citizens; that they realize that a comprehensive education prepares a student for an enriched, meaningful life, and that education challenges students to grow and develop as individuals.

Another participant stated, "the fact that they prepare students to flourish in a future that we can't predict." While a third posited, "[i]t prepares students for an uncertain future. It helps them learn how to learn." These responses indirectly point out that the purpose of the education is contrary to Two respondents noted some confusion on the wording of the sixth question, and opted to not answer.

Importance of liberal arts colleges

Educating the whole person	38
Interactions	11
Size	7
Student focus	6

The findings here deviate a bit from the emphasis on community by instead focusing on educating the whole person. Because of the phrasing of this question (one of the drivers of this research is about how liberal education is provided today in higher education. From your experience and knowledge, what is most important about liberal arts colleges today?) and the questions placement after question 5, respondents likely interpreted this question in relation to other institution types – hence educating the whole person affiliated with liberal education becomes the dominant code because of the national conversation about education for professional/vocation vs. education for citizen/the whole person. As this pertains to the whole person, these respondents

commented on the importance of student's developing intellectually, socially, emotionally, and, in the cases of some religiously affiliated schools, spirituality.

Summary

The research questions to this study may be directly answered and summarized as follows, beginning with the secondary research questions.

(i) If the school has an honor code, if and how does it relate to liberal arts education?

Forty institutions in the sample have formal honor codes. Additionally, schools lacking honor codes have similar policies regarding student academic and social behavior. I am therefore unable to make an explicit connection to liberal education. This interpretation was somewhat confirmed by the survey results when 43 participants ranked honor codes as the least importance institutional component.

(ii) What educational experiences are required for all students?

These schools require multiple educational experiences – specifically, residential living on campus, fulfillment of some breadth requirement that commonly involves but not limited to writing intensive courses, learning a foreign language, physical education, and passing a first-year seminar. The depth requirement is fulfilled through the completion of a major.

(iii) What are the faculty-student ratios for each institution, including average class sizes?

Data outlined above indicates that these schools employ predominantly tenured and tenure-track faculty with enrollments no fewer than a few hundred and no more than approximately 3,500 students. Class sizes are overwhelming small with 9-19 students.

(iv) How does the school articulate liberal education on institutional webpages?

Community represents the most common element regarding how schools articulate liberal education on institutional webpages. Other elements noted are too diffuse to draw a significant connection to liberal education, though all findings for this question align with traditional definitions found in the literature. The emphasis on community was confirmed in the survey results when 57 respondents identified engagement with faculty and staff as the most important institutional component. Later on, the theme of interactions was the most prevalent in responses to the question about distinctiveness of community at liberal arts colleges. Finally, 22 respondents identified mentorship as the distinguishing feature of liberal arts colleges.

(v) What percentage of students live on campus?

In the sample, the majority of institutions (62 in total) housed over 81% of students on campus. In responses to the survey question asking participants to rank institutional components in order of importance, residential fairly distributed in the middle.

(vi) What, if any, does the presence of co- and extracurriculars indicate about liberal education?

Similar to honor codes, the findings are insufficient to determine anything beyond student opportunities broadly defined. In the survey, respondents identified co- or extra-curriculars with middle-to-low importance of institutional components. This ranking may be in part that respondents were presidents and chief academic officers, and therefore inclined to view such things with lower importance.

To turn to the primary research question, to what degree do liberal arts colleges have shared, cross-institutional components that comprise liberal education, I argue that the most salient and shared traits for these schools are small, interactive communities

with residential living and curricula focused around some form of curricular breadth and depth. Here, community and curriculum contextualize each other and, when taken together in concert, comprise the practice of liberal education. Speaking to the curricular components, these require students to not only pass classes in a variety of disciplines or perspectives but also fulfill various requirements.

I interpret this data as indicative of academic environments that are designed for close mentorship of students with a holistic understanding of precisely what should be developed and cultivated during their undergraduate studies. I find taking into account a student's intellectual growth in addition to her or his mental, emotional, social, and at times spiritual development to be a daunting task, though these schools exhibit strong commitments to offering such an educational experience. Some research questions, notably related to honor codes and co-/extra-curriculars, did not yield substantive insight into the practice of liberal education. Survey findings by and large confirm all the findings.

Chapter 5

Discussion

Overview

The final chapter is organized into four main sections. The first section, implications for practice, details how the findings in this study are contextualized within the broader body of higher education research. This contextualization helps us better understand what this study means with regard to curriculum, physical education, community, faculty & staff, and assessment. Second in the further research section, I offer a few suggestions for future studies on faculty work across different institution types, a comparative piece on institutions themselves, a means of exploring student inputs to these schools, and finally a step forward in examining curriculum. Third, I construct pragmatic typology from the conceptual typology and the findings, thereby outlining both the conceptual and practical components of liberal education. Fourth, I offer my concluding thoughts on this study and the current state of liberal education and liberal arts colleges.

Implications for practice

Curriculum: the ebb & flow of breadth & depth.

What remains evident about curriculum throughout the findings on the graduation requirements is that the traditions of the orators and philosophers are still present even after two millennia. Writing and oral communication requirements, descriptions of

mature and effective communication, foreign language requirements, and an emphasis on living in community are extensions of the oratorical tradition. Reflection, critical thinking, and educating the whole person (e.g. intellectually, socially, ethically, spiritually, physically) are learning outcomes rooted in the philosophical tradition. Regardless of a school's curricular arrangement, adaptations of these two traditions remain present in the educational requirements.

The shifting understanding regarding curriculum, that is the presence of mixed and thematically arranged general education requirements, is implied by the kind of disciplines that should be associated with liberal education. It does not seem logical to exclude inherently professional programs in our understanding of liberal education for two reasons. First, it places a restriction on the breadth component. Second, professional programs can, after all, be taught with similarly strong constructs of community. That said, professional schools likely miss the breadth component of the curriculum by requiring a student to specialize only in his or her chosen field.

The 32 institutions with discipline-arranged curricula align most clearly with the association of the liberal arts and science disciplines with liberal education. In other words, the coursework along the humanities-social sciences-natural sciences spectrum comprise the liberal education curriculum with students' general education defined and structured by disciplines alone. The 60 schools with either entirely or partially thematic-arranged curricula and five with open curricula mean that data from 65 schools in total present a departure from the discipline association. These schools instead emphasize the purpose of the breadth and depth of one's coursework instead of merely students studying specific disciplines. As such, over 60% of institutions in the sample indicate a shift away

from what exists in the literature by emphasizing the themes or purposes of general education instead of the disciplines of the liberal arts and sciences.

The curricular themes illustrate some of the contemporary 'big questions' or issues that faculty and staff perceive to be in need of addressing. Some of these questions and issues pertain to differences in modes of thinking as well as culture. Others are relatively new to liberal education, such as those focused on topics related to diversity or our global society. One hundred years ago, such a theme would likely not exist as education pertained more so to the study of the classic works of the Western Canon. Such works were understood as essential to the slow, steady development of civilization, the acme of humanity's efforts, and the actualization of scientific progress and/or the Christian notion of the Kingdom of God. The latter two elements played significant roles in academia, particularly those liberal arts colleges founded and governed by Christian denominations and staffed and run by laity and faculty. Contemporary requirements related to diversity and globalization may represent how critical theory (e.g. race, colonialism, gender, sexuality), post-modernism (e.g. cultural relativity, Roth's (2014) point on Culture becoming culture), and the admission of new student demographics (e.g. co-education, integration) affect the evolution of curriculum.

Despite such new themes, it remains to be seen how different a student's transcript would look when progressing through a thematically arranged curriculum as compared to those attending a school with a more discipline-oriented curriculum. I hypothesize that the differences would be negligible as the sample institutions, like many in American undergraduate education, typically focus on disciplines in the fine arts, humanities, social sciences, and natural sciences.

For example, St. Mary's College's (2015) Sophia Program in Liberal Learning has a mixed thematic-disciplinary curriculum. The following allows a student to satisfy each thematic requirement: cultures and systems involve one literature course, one history course, two modern language courses, and one social science course; traditions and world views involve one philosophy course, two courses in religious traditions, and one history course; science for the citizen requires two natural science courses with at least one lab and one social science course; arts for living involves creative performing arts, professional arts, and mathematical arts. They also detail the wide variety of courses across the curriculum that satisfies these various requirements.

Let us compare a student's transcript reflecting the St. Mary's Sophia Program to a student fulfilling the general education requirements at Morehouse College (2015). At Morehouse, students must take the following: two English courses, two history, two mathematics, one foreign language, one or two reading courses depending on SAT/ACT scores, four electives in the humanities, two science electives, two social science electives, two physical education courses, pass Freshman orientation, pass Freshmen assembly and Junior assembly courses, and fulfill a computer literacy and information literacy requirement. In both institutions, students pursue coursework in foreign languages, history, English (including at least one literature course), social sciences, and natural sciences. While particulars such as the arts for living requirement at St. Mary's and the assembly courses at Morehouse remain distinctive, student transcripts likely look similar at both institutions.

Regardless, the differences in curricular arrangements (i.e. disciplinary, thematic, mixed, and open) represent a shift in the thinking of the "breadth" component. It indicates

a departure from specific disciplines and more toward linking learning outcomes with the purposes behind the general education. This shift calls into question the tradition of restricting professional disciplines such as nursing or business from the liberal education curriculum. Thematic learning outcomes centered on discovering the diverse world could be accomplished in business, while a nursing course exploring issues with patient care could fulfill requirements relating to scientific analysis or ethics. Limiting these disciplines to the breadth of study then is ironic as it limits the very notion of "breadth." That said, the schools adhering to a discipline-specific curricular are equally capable of meeting the learning outcomes found in the themes, even though the curriculum is not arranged as such.

Each of the curricular arrangements maintains the breadth and depth function of a liberal arts education – namely, the breadth of knowledge in a student's general education and then depth in the major. For a set curriculum that requires specific classes or for a curriculum arranged by themes, each student still learns a wide variety of disciplines from a variety of experts. These curricular distinctions, however, may be irrelevant because the outcome is similar: students learn different subject matters, and as such learn about different perspectives, methodologies, and variations of knowing. Given the Carnegie Classification stipulations of the sample set, the offerings of either a Bachelor of Arts or Bachelor of Science degrees are largely uniform. Classification, therefore, may also indicate that transcripts between institutions may look similar, though further research would be required to confirm such a hypothesis.

The significant question about the discipline and thematic approaches to framing curriculum points to the debate in academia about Culture vs. culture (Roth, 2014). What

matters more in terms of student learning: the great books of the Western Canon or a plurality of perspectives? A plurality of perspectives occurs either way, but an exposure to specific texts or thinkers, be these deemed classic, great, or otherwise does not necessarily occur. By default then, liberal education's curricular importance lies in the plurality of perspectives and not necessarily specific texts or thinkers. Similarly, the disciplines themselves may not matter as much as the purpose behind taking the courses. I find the argument that reading figures such as Aristotle, St. Augustine of Hippo, or Shakespeare simply because they are Aristotle, St. Augustine of Hippo, or Shakespeare to be too simplistic. After all, one could also learn about philosophy from studying Jane Addams, reflect on theology with an examination of Simone Weil, and explore literature through the works of Chinua Achebe or Haruki Murkami. The themes essentially outline *why* such study should be considered important instead of relying upon a values-based argument that claims such authors to be good unto themselves. Attention to *why,* as well as *how,* such studies should occur echoes the thinking of John Dewey and Martha Nussbaum (Nussbaum, 2012).

Michael Roth, president of Wesleyan University, (2014, p. 174) notes how Dewey argued *against* the idea that select disciplines should be classified as liberal. In other words, Cicero's *artes liberales* quadrivium and trivium mattered in antiquity, but less so now. Dewey instead focused on, to use modern parlance, learning outcomes. In other words, education is for "liberating students…. so that they can continue to learn through inquiry in their private and public lives" (p. 174). The learning, then, of liberal education does not confine itself to academic disciplines and departments but rather in life itself.

The themes in the thematic and mixed curricula point to such thinking more explicitly than discipline-defined curricula.

In recent years, Martha Nussbaum continues Dewey's position by stressing the importance of *how* something is taught over *what* is taught. She advocates for "a reflexive, Socratic pedagogy emphasizing the critical examinations of oneself and what is taken for granted in the opinions of others" (p. 179). Such an approach stands antipodal to "rote learning and narrow skill building" (ibid.). It should then be considered that the education of which Nussbaum writes depends heavily on the quality of interaction between students and faculty. Based on findings, staff should be included as well. Also of note, disciplines in the liberal arts and sciences should not be considered by default to be better than vocational or professional programs – a common assumption found in the literature because frequently vocational or professional represents the "rote learning and narrow skill building" of which Nussbaum writes. The liberal arts and sciences can also be taught in a manner that requires rote learning of students. A history class might require students to regurgitate dates, places, figures, and names. A social science professor may only grade students appraisingly if they simply ape the professor's own thinking in papers. I agree with Nussbaum's assertion then that *how* students experience education matters more than *what* students learn in and from the curricula. In her own words on liberal education itself, Nussbaum (2012) says

> … liberal education has high financial and pedagogical costs. Teaching of the sort I recommend needs small classes, or at least sections, where students discuss ideas with one another, get copious feedback on frequent writing assignments, and have lots of time to discuss their work with instructors (p. 125).

Community, therefore, plays an integral part in both the delivery of curriculum and, by extension, the practice of liberal education. Nussbaum's position offers further evidence

that specific disciplines may not matter as much as the community component, the deep learning or close learning to use other terms with similar meaning.

Physical education.

At first, the presence of physical education requirements struck me as somewhat of an outlier given that all other requirements focus primarily on developing students' cognitive faculties. Upon further research, I discovered two reasons for their inclusion – historical and physiological. Historically, one reason for including such a requirement may be traced back to Greek antiquity: "beginning with the ancient Greeks, athletic pursuits have been recognized as a valuable component of a complete education" (Clotfelter, 2011, p. 7).[3] For example, Aristotle argued the state of one's physical body to be important in the pursuit of ethical living (Oskvig, 2013). Aristotle (1999) also posits physical abilities to be similarly laudable as ethical or moral actions:

> In other words, we praise a just man, a courageous man, and in general any good man, and also his virtue or excellence, on the basis of his actions and achievements; moreover, we praise a strong man, a swift runner, and so forth, because he possesses a certain natural quality and stands in a certain relation to something good and worth while (p. 28).

He goes on to explain this type of praise as a mechanism by which to acknowledge the "good" in another, with good here being defined as an ethical or moral good. Linking

[3] Here, I read Clotfelter to be referencing the Greek notion of *paideia*, which some scholars argue became the Latinized *humanitas*. *Paideia* as a term has historically been translated to mean,
both the culture or civilization of its time (with a very wide technical range from literature to art, athletics, mythology and religious expertise) and it means the process of education by which a command of the culture and its tradition were acquired (Elsner, 2013, p. 137).
In other words, *paideia* took a holistic approach to educating the person, mentally, physically, and in some sense spirituality (p. 148). In Elsner's analysis of the term and its evolution, he points out that this interpretation may be too overreaching. In some instances, he points out, *paideia* connotes "little more than a 'syllabus of various subjects'" (p. 151). This debate on the definition of the term *paideia* carries remarkable similarities to that of liberal education – namely, is it something more with high ideals or is it merely a collection of disciplines or subjects. The connection between the two should not be lost, though I could not at time of writing find a substantive work of scholarship connecting the two. That said, Southwestern University, a school in the sample, has a program titled '*paideia*' and describes it highly collaborative and interactive educational experience to "help you connect difference classes and departments" (Southwestern University, 2015).

physical strength and bodily health in a college education is, therefore, nothing new. These roots have evolved overtime to include such stereotypes in the early 1900s like the "Arrow Shirt Man" whose stiff collars and handsome features came to typify the strong, confident, and well-tailored college gentlemen" (Thelin, 2011, p. 166).

The historical reason for a physical education is likely the primary or sole reason for their inclusion in some of the school's curriculum. That said, the historical premise has been confirmed by scientific analysis as part of the growing body of research on the mind-body connection. In other words, improving the body through physical activity such as cardiorespiratory fitness has positive gains in terms of overall health (Castelli, Brothers, Hwang, Nicksic, Glowacki, Harrison, & Van Dongen, 2013) and that regular physical activity may positively affect brain-related function and outcomes (Loprinzi, Herod, Cardinal, & Noakes, 2013). While more data on the mind-body connection is still needed, it remains evident at this point that physical education requirements are highly valuable within the framework of liberal education and its claims to educate the whole person.

Faculty & staff.

One implication for this research that practitioners and advocates should take away involves the role of staff in liberal education. In short, advocates of liberal education should better recognize the role of staff. The matter of co- and extracurriculars and the high percentages of students living on campus indicate ways in which staff help perpetuate this tradition in their professional work. As noted previously, Roth (2014) explains that the rise in student services is due to faculty overspecialization. Given that student services professionals primarily come from higher education programs

specializing in student development, educating the whole person is just one area of significant overlap between these two paradigms. While educating the whole person may be the term in liberal education, students affairs frame it with terms such as holistic development theory or emotional, mental, physical, spiritual, and social development. These two paradigms both focus on ensuring students mature in ways beyond content obtainment in the classroom.

While I did not find a substantive connection between honor codes and co-/extracurriculars and liberal education, residential living clearly matters a great deal as to how students experience liberal education at schools in this sample. Just as best practices do not guarantee best results, size also does not guarantee a positive student experience or the generation of positive student outcomes. In fact, the research indicates that a small size in and of itself has not shown positive effects on student learning (Pascarella & Terenzini, 2005, p. 596-7). What can be said about these numbers in the findings has to do with setting the stage for success and the setting for best practices. For example, there exist strong correlations between teacher behavior and students' learning of course content. According to research,

> Such factors as teacher preparation and organization, clarity, availability and helpfulness, quality and frequency of teacher feedback, and concern for and rapport with students continued to have significant, positive correlations with student mastery of course content (Pascarella & Terenzini, 2005, p. 612)

With regard to these schools, such a high number of tenured and tenure-track, full time faculty members may set the stage for a faculty capable of practicing those exact habits.

In our era, size remains a challenging topic when colleges and universities face increasing pressure to do more with less. "Optimum size – a classic Greek concept – is not much thought about in late-twentieth-century America" (Kopnik & Graubrand, 2004).

Neither is it much thought about in the early 21st century. These schools in the sample are varied in religious affiliation (or lack thereof), single-sex/coeducational, and curricular approaches to general education. Some are historically black institutions while most are predominantly white institutions. According to Koplik & Graubard (2003), "these differences do not undermine their common characteristics: residential, small (five hundred to three thousand students), educationally comprehensive, close interaction between student and teacher, and totally dedicated to undergraduate education" (Koplik & Graubard, 2003). In other words, while size may not matter per se, living on campus does and this aspect falls almost exclusively in the domain of student affairs.

Higher education research has demonstrated the positive effects of living on campus:

> … living on campus had statistically significant, positive impacts on increases in aesthetic, cultural, and intellectual values; liberalization of social, political, and religious values and attitudes; development of more positive self-concepts; intellectual orientation, autonomy, and independence; tolerance, empathy, and ability to relate to others; and the use of principled reasoning to judge moral issues. Residing on campus also significantly increased the likelihood of persisting in college and earning a bachelor's degree (Pascarella & Terenzini, 2003, p. 603).

As the work of staff in student services has increased, it is apparent that both faculty and staff work contribute greatly to a student's success. Because of the construct of liberal arts colleges, it stands to reason that both faculty and staff should be considered important to the practice of liberal education.

That said, there does exist as a tension here between community and curriculum. After all, faculty and staff are in their own ways competing for student attention, interest, and work. Intercollegiate athletics as well as fraternity and sorority life represent just two examples of extra-curriculars that can consume substantial portion of a student's time.

Perhaps points of collaboration should be better incorporated into the student experience such as integrating service-learning requirements in coursework.

Assessment.

In discussing my dissertation research with others and in reading articles on liberal education written by advocates, it became clear that some advocates criticize some forms of assessment. For example, Christopher Nelson (2014), President of St. John's College in Annapolis, MD, states, "dialectical learning cannot be assessed in the ways used for information and skills—and especially not by timed questioning intended to elicit valid responses according to a predetermined "competency framework." Similarly, Cary Nelson's (2011) opinion piece for the Chronicle of Higher Education offers one example of problematizing assessment and the work some humanists like Nelson see themselves doing. I find this criticism, sometimes presented as a fear and at other times a concern, to be misguided and actually counterproductive. It does, however, make sense.

The fact that some liberal education advocates criticize assessment may explain, at least in part, the dearth of social scientific research on liberal education and liberal arts colleges. During higher education's boom after World War II, the overall direction went exactly opposite from the small, residential collegiate model through the creation and growth of the community college system and the large public university model (Koblik & Graubard, 2003). Because of this general direction, small residential colleges remained small in number during the great expansion after World War II. As a result, the discipline of higher education – itself primarily social scientific – as well as the research funding and grants supporting such research typically do not focus on these schools.

Additionally, the idea of certain types of assessment may be antithetical to the notion of liberal education itself at these schools. Namely, standardized testing and generalizability may be out of place in the educational approach of these schools, specifically the highly individuated learning that focuses on addressing existential questions related to topics such as ethics, identity, social responsibility, epistemology, and theodicy.

That all said, some organizations like the AAC&U and the Teagle Foundation are pushing for more assessment around liberal education and general education, and I think they are right to make the case of supporting liberal education through using assessment. Assessment can take so many forms – standardized tests, classroom observation, surveys, focus groups, interviews, essays, to name only a few – that an outright dismissal is too simplistic of a position to assume. Done well, assessment can provide powerful insight to further our understanding of liberal education.

One means of doing so would be to develop an assessment tool to explore liberal education across multiple institution types. Such a tool would need to incorporate both conceptual (e.g. critical thinking and analysis, autonomy, service & community, empathy) and practical components (e.g. the diffuse learning both in- and outside the classroom, a breadth and depth of study, school community, communication training) of liberal education. It would in essence allow us to measure a school's liberal education-ness. With enough data from multiple institution types, this type of assessment could then be used to reanalyze both the criteria of and the institutions in this study's sample set.

Suggestions for further research

During this research, multiple areas of further research became apparent due to the dearth of social scientific data on liberal education. I've divided these possibilities into four categories: faculty, institutions, students, and curriculum. While such categories are organizationally useful, each sheds light on the other categories and the topics discussed therein.

Faculty.

The tension inherent within and the politicized nature of labels, here liberal arts colleges and liberal education, are common challenges for research of this nature. Larger schools claim to offer the experience of liberal arts colleges in honors and residential colleges. Many institutions claim a part of the heritage through schools of liberal arts and sciences. To tackle this challenge of delineating these terms, I took a minimalist approach as to which institutions qualify as a liberal arts college, and by extension as perpetuators of the liberal education tradition. In informal conversations during my research, this was a frequent point of contention and challenge. Comments such as "surely you are looking at X school" or "how can anyone say Y university does not take community seriously" became some of the more common responses when explaining my research, its goals and findings.

After some reflection, the sample selection and a minimalist approach was the right choice because from here it establishes a base line by which to measure other schools while also pointing to areas in need of future research. For example, many schools have similar faculty-student ratios. The ratio, however, is easily misconstrued and points to the importance of understanding context with regard to such a statistic.

For example, The University of Virginia (UVa), where this research was conducted, has a 1-to-16 faculty-to-student ratio (US News & World Report, 2014). Such a ratio appears to be comparable to the liberal arts colleges in my sample. There are, however, discrepancies that complicate such a comparison. First, UVa enrolled 14,898 undergraduate students during the 2013-2014 academic year (University of Virginia, 2014). A single UVa class is larger than the largest school in the sample, Hope College, with 3343 students. Second, its class size data indicates 55% of classes have fewer than 20 students, 29% have 20-49, and 16% are 50 or more (US News & World Report, 2014). Such data combined with the faculty-student ratio indicates a type of community and similar to that of the liberal arts colleges, where the vast majority of classes enrolled fewer than 20 students, some enroll less than 40, and only a small handful have classes over 40. Third, UVa has 41% living in campus housing (University of Virginia, 2014). While this number is higher than the lowest percentage in the sample set, it is still 40-point lower than the average for liberal arts colleges. If included, it would be the second lowest institution. Fourth, UVa is a Research 1 university with a high degree of research activity. This means faculty work carries a different set of priorities than those at the schools in the sample. Having worked and studied at both liberal arts colleges and Research 1 universities, the demands to publish, obtain external funding, and conduct external service are considerably higher at research universities than at liberal arts colleges, where teaching and internal service appear to be the top priority for faculty work.

Data, however, are still needed to understand better how faculty work is prioritized and incentivized across different institution types. On this topic, Michael Roth

(2014) posits a concern about teaching, though not about the curriculum. Continuing lines of thought by William James and John Dewey, he criticizes the overspecialization of faculty coming out of research universities. The main issue is that the faculty themselves may not be equipped to actually teach liberal education because they no longer are able to think as due to the increased emphasis on research over all other faculty activities.

This overspecialization has also given rise to student services professionals such as those found in a Dean of Students Office (Roth, 2014). Overspecialization, in turn, means the inability, due to lack of skill or priority, of faculty to engage students as whole persons. The picture Roth paints is that they merely teach their content specialty when necessary and often poorly due to a lack of pedagogic training. There is no time for them to learn or practice how to educate the whole person, let alone think beyond the parameters of their specialty. This issue is in part a perspectival issue stemming from the research necessary to obtain a Ph.D. (Might, 2014). In other words, research faculty are too overspecialized to teach students the breadth component of liberal education.

This development is a continuation of the German model of education that sees education as a means for advancing scientific progress instead of a means for educating a citizenry. The question remains of how compatible these two models are. While the two models are treated and understood to be discreet institutions, faculty members may not experience them as mutually exclusive. For example, such a trajectory would mean that a loop occurs between the British and German models when some faculty members hold bachelor's at liberal arts colleges, receive graduate degrees at research universities, and then teach in liberal arts colleges. Other times, it is a one-way street of a student holding undergraduate and graduate degrees from research universities who then end up at liberal

arts colleges. Further research is needed to understand how these two faculty groups perceive the purpose of higher education and the role of faculty and staff, and the idea of the breadth and depth in liberal education, to determine whether there are differences between them.

Institutions.

The minimalist approach discussed above excluded a number of institutions and institution types that could be studied to further our understanding of liberal education. To address this exclusion, further research on how schools frame and state their understanding of liberal education at their respective institutions could be explored. During data collection, I discovered that many schools had proclamations, statements, white papers, outlines, learning outcomes, etc… detailing that school's interpretation of liberal education. In most cases, it was unclear who the intended audience is or why these documents even exist. Some were found in course or college catalogs, while others were random websites. Some existed on a faculty member's profile pages, and still others were found in the "about" section of an institution along webpages detailing institutional history and leadership.

It stands to reason that institutions representing other institution types may have similar statements and as such could provide a mechanism by which to examine statements on liberal education across multiple institutions and institution types, thereby addressing the limitation of this dissertation's minimalist approach. An immediate obstacle for conducting such research, however, is that many of these documents were discovered accidentally. It is unclear how one might conduct a systematic study or even whether or not such a study would yield anything beyond the usual tropes on liberal

education noted in the literature review above. In other words, such statements may turn out to be as generic as mission statements as described by Delucci (1997). Nonetheless, it may help understanding if liberal education at different institution types in turn produces different iterations of the tradition, thereby clarifying what liberal education at the University of Virginia means in comparison to its practice at Oberlin College.

Students.

The question of student inputs and self-selection to these schools also deserves more attention. These schools attract competitive students as evidenced by over half of the sample being "more selective" in the Carnegie Classification system, which may be partially explained through a linkage between highest tuition prices in America and demand. The rest of schools in the sample are "selective" or did not report the necessary data.

A study of admissions data could be conducted to understand better how liberal arts colleges fit into the higher education landscape. In conversation with former presidents of two liberal arts colleges, it was revealed that each institution most often competed for students not with other liberal arts colleges but large public universities that were either in-state or in a neighboring state. These observations indicate that liberal arts colleges are operating as regional elites. If liberal arts college naysayers ever become correct and these schools disappear, the problem of undermatching (Suspiano, 2014; Smith, Pender, & Howell, 2012; Roderick, Coca, & Nagaoka, 2011; Bowen, Chingos, & McPherson, 2009) would be exaggerated by pushing qualified students to less selective institutions. Furthermore, something is occurring at these institutions that "continue to produce disproportionate shares of the country's leaders – doctors, lawyers, teachers and

professors, politicians and civil servants, and businessmen [and businesswomen]" (Koplik & Graubard, 2003). In light of such factors, we need to understand better the interplay between institutional effects and appeal to certain type of student.

Curriculum.

If we take the position of many liberal education advocates that studies of breadth and depth are better than vocational or professional studies, we should study and analyze such claims. Some data discussed in the literature review point to this being true, but it is unclear what can be attributed to students self-selecting into such schools and what are the institutional effects. As a starting point, a mixed-methods comparative case study of three institutions could examine differences in student experiences. The three institutions represented could be divided by Carnegie classification type of arts and sciences, balanced, and primarily professional studies. An alternate selection could be an undergraduate teaching college, a small comprehensive university, and a large research university. Differences in socio-economic status, race, gender, sexual orientation, first-generation status, and the like would need to be accounted for, but such a study could test with social scientific analysis the assumptions made by liberal education advocates when critiquing professional programs.

The full spectrum of analysis is possible here, and liberal education advocates should take certain cues from the contemplative sciences. For example, neurological studies using fMRIs could be conducted to determine if there are any differences in brain development for students majoring in a discipline associated with the liberal arts and sciences such as history or chemistry when compared to those studying professional degrees such as nursing. A pilot study could be conducted at a research university that

contains a variety of both types of programs as well as access to an fMRI for a four-year study of a group of students. A comparative study of this nature could help shed light on how we understand the liberal arts versus professional studies binary so often discussed. It may also shed light on the idea of exposing students to a wider variety of modes of thinking and problem-solving in the breadth aspect of liberal education and if any effects are noticeable on the neurological level, probably in the prefrontal cortex. Given the evidence of the neurological effects of contemplative practice, it is possible for some type of neurological effect to be occurring when comparing students studying in the breadth and depth of liberal education and those studying a single, specific mode of thinking (i.e. only depth, no breadth).

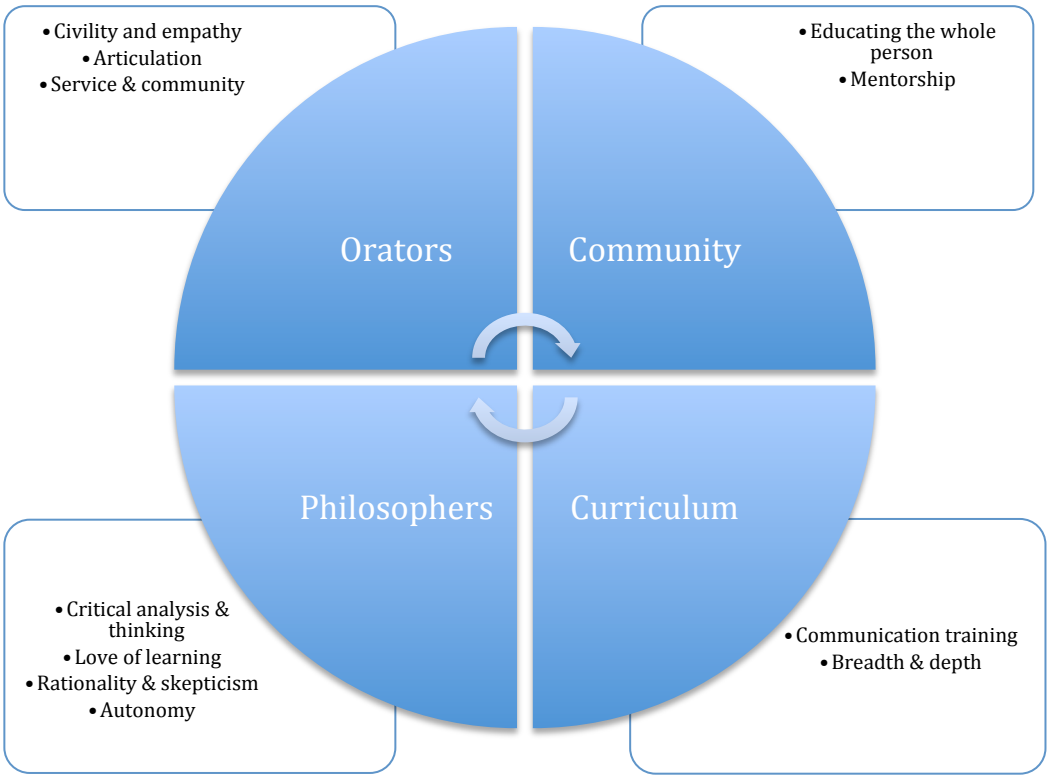
Pragmatic typology

In light of the findings of this study, the pragmatic typology may be constructed around the two pillars of curriculum and community. As outlined in the literature review, seven learning outcomes comprised the conceptual typology: civility and empathy towards others, including those persons of different cultures and ideologies; critical analysis and thinking; clear, mature, and thoughtful articulation, both oral and written; a love of learning that drives creativity, imagination, and intellectual exploration; a commitment to service and community; rationality and skepticism; and, autonomy in light of ambiguity and complexity.

Based on the findings, the practical typology has been sorted into two aspects of community (educating the whole person and mentorship) and two aspects of curriculum (communication and plurality of perspectives). Regarding the community pillar, educating the whole person involves residential living, co-/extra-curriculars, physical

education, and opportunities for students. In 40 institutions of the sample, this involves an honor code. Educating the whole person, in other words, pertains to learning both in- and outside the classroom in such a way that develops a student's capacity for understanding their own self as well as their relationship with others. Mentorship involves first-year programs, remaining small institutions with small classes, and student access to staff and tenure-track/tenured faculty members. In this environment, educating the whole person occurs through mentorship. The end result is a type of diffuse learning occurs throughout the close academic community.

Regarding the curriculum pillar, extensive communication training is represented by writing competency requirements, either through intensive courses or examinations, along with the occasional oral competency requirement. The breadth and depth component is comprised of specific themes or courses in the liberal arts and sciences (i.e. humanities, social sciences, and natural sciences) as well as non-Western/global perspectives (including foreign language), various theories and modes of thought (e.g. critical theory, quantitative reasoning), and an undergraduate major. The breadth and depth of study through close mentorship with faculty and staff reinforce this practice of diffuse learning that moves beyond simply content obtainment and regurgitation in the classroom.



Pragmatic typology of liberal education – concept & practice

The philosophical and oratorical traditions (Kimball, 1995) are present in the pragmatic typology. The community component aligns closely with ideals associated with the Oratorical tradition – namely, the emphasis on the individual living in community. The curriculum aligns with both the philosophical tradition in its emphasis on the breadth and depth of study and the oratorical tradition with the emphasis on communication training. Similarly, educating the whole person and communication both present the oratorical emphasis on community while mentorship and plurality of perspectives fall more so in the domain of the philosophical tradition. To be sure, all of these components mutually reinforce each other and cannot, at least based on the findings

of this study, be disaggregated from each other with regard to the pragmatic typology of liberal education.

While the conceptual typology stems from the literature review, the practical components represent the most shared components of how these liberal arts colleges practice liberal education. Using this framework, the practices of what constitutes liberal education have become clearer both through the literature and data from institutions in the sample. Furthermore, this pragmatic typology presents a definition of liberal education that incorporates both conceptual and empirical elements.

Institutional caveats to community

The emphasis on community may be in part due to the selection of the schools themselves in the sample. After all, liberal arts colleges' mission focuses solely on liberal education. By studying these colleges, I am not studying liberal education universally. Rather, I am studying liberal education within the institution type that is defined by their commitment to liberal education. This focus is a limitation of the sample set and an important caveat to the community emphasis. If we expanded the sample to include different institution types committed to liberal education, I assume there would be less emphasis on community and more shared emphasis on the curriculum, specifically the liberal arts and science disciplines as well as the breadth-depth component.

The emphasis on community should not be conflated as generalizable to all of institutions claiming a mission commitment to liberal education but rather indicative of one important facet. However, now that we understand this distilled version of liberal education at these singular purpose schools, these data will help us in turn understand liberal education at other institution types such as research universities.

The emphasis on community also may complicate the criteria outlined by Breneman (1994) on selecting this sample set. One logical extension would be to broaden the scope of the criteria to account for this notion of community. To be clear, the liberal arts and sciences curriculum cannot be dismissed, which aligns with the general education findings. That said, adding a criterion on community to establishing the sample set cannot be done by the data in this study alone. Given the level of analysis and limiting data collection to webpages and a survey, I did not capture what community means or even what it may look like, but rather a strong indicator of its importance. That said, it would be reasonable to expect that some of the indicators of community such as class sizes, faculty-student ratios, and institutional about pages would be present in similarly sized institutions not in the sample.

As higher education has evolved in America with regard to extending access after World War II, these liberal arts colleges remained small while others grew into larger universities. The choice to remain small can be contributed to contextual factors. For some, it appears rural locations, such as Sewanee or Kenyon, may inhibit an institution's ability to attract large number of students. For others, the decision appears to have been more deliberate for schools such as Swarthmore, Bryn Mawr, and Haverford, all of which reside just out of Philadelphia. Whether purposeful or not, the size of these colleges greatly impacts the findings on community in this study.

Community & curriculum

Though the curricular breadth-depth element cannot be dismissed, an essential value of liberal education may be found in this notion of community defined by interaction and socialization with faculty and staff. Two important notes need to be made.

First, student engagement appears important to this notion of community, but it is not the focus of my study. The type of data gathered and the level of analysis achieved do not indicate specific details on student engagement. Similar to student inputs and outputs (see note in the introductory chapter), why engagement matters and what engagement entails pertains to the student experience, and therefore falls outside my focus on institutional components.

Second, I am not arguing that community solely exemplifies liberal education. It may be that the function of community is based on the curricular breadth and depth component – namely, students interacting with faculty and staff that are experts from a wide variety of fields. To be clear, however, the breadth-depth does not appear to necessitate coursework in the liberal arts and science disciplines. It may be accomplished by any number of ways, be it disciplinary, thematic, or student-selected, and possibly involve coursework in pre-professional disciplines.

Conclusion

This dissertation research is not about particulars, such as athletics at Williams College or Sewanee's 1300-acre campus. It is about studying the commonalities of institutional practices that are based on traditional associations of liberal education in the literature. I found this more delineated study to be easier to maintain a strong methodological foundation by aiming to avoid both focus-sprawl and becoming too mired in particularities. The purpose of this study is in part to see how strong are the ties that bind these schools together through traditional associations found in the literature. Overall, size, full-time faculty, residential living, commitments to curricular breadth and depth, and the high ideals of liberal education comprise the factors that bind

these institutions into an organizational field. The data directly answer the primary question of to what degree liberal arts colleges have shared, cross-institutional components that comprise liberal education.

The findings also align well with components described in the literature review. After all, four out of six secondary research questions were found to carry explicit links to liberal education. Finding these explicit links, in and of, themselves, is an indicator of how well these schools function as an organizational field. It is also surprising as these liberal arts colleges largely evolved autonomously and independent from one another. There exists no oversight or centralized authority across institutions similar to that of a state's public system of higher education. Aside from the cross-pollination of faculty and staff hiring, the only formalized unifying groups were small, regional consortiums such as the Associated Colleges of the South and general external groups such as Council of Independent Colleges (CIC) and National Association of Independent Colleges & Universities (NAICU). Smaller collectives occur as well, such as the Annapolis group, which is comprised of a collection of liberal arts college presidents and has "purposefully avoided organizational apparatus and limited themselves to discussions of shared problems as well as projects to address them" (Koplik & Graubard, 2003, p. 19).

In this dissertation, I argue a number of points that either challenge or deviate from the literature. As such these points will hopefully advance our understanding of both liberal arts colleges and liberal education. First, advocates of liberal education should focus more on Nussbaum's *how,* perhaps taking into account the best educational practices found by researchers like Pascarella, Cruce, Wolniak, and Blaich (2004), Astin

(Koblik & Graubard, 2003), and Kuh (2003), and on the community existing in these liberal arts colleges.

Second, community constitutes a significant value of liberal education. I acknowledge that this position goes against the normative argument that the value of liberal education resides in the disciplines of the liberal arts and sciences. To be sure, the curricular value remains important to our understanding of liberal education, and it establishes a framework by which the ideas of breadth and depth of study may be structured. There might be some aspect of delivering this breadth and depth of study that necessitates or operates best in a close academic community where faculty and staff work focuses almost solely on mentoring students.[4]

Third, greater attention needs to be given to the common ground between holistic student development research and liberal education as student services staff appear to be in a prime position to contribute to the latter. Just as community should be given more attention, the aspects of liberal education occurring outside the classroom need to be recognized and staff be given due credit as perpetuators of this tradition in their own right and work. Though there exists a tension between community and curriculum that represents the difference between college as an academic endeavor and college as a social experience. While these two do not have to be mutually exclusive, work can be done to support both.

This dissertation connects two academic domains that tend to be discrete: social scientific analysis of higher education and the literature on liberal education. This

[4] That said my sample only contains schools that do not have a high percentage of professional offerings. Therefore, this importance of community may also exist in those small institutions that predominantly offer professional degrees such as Rose-Hulman Institute of Engineering in Indiana but my data were not able to establish that fact.

disconnect may be because advocates of liberal education tend to be humanities scholars like Nussbaum and Delbanco or former presidents such as Ferrall and Oakley. For social scientists of higher education, this disconnect may exist because of the low interest in the history and philosophy of education. While contributions of these advocates to the literature remain substantive, the research on higher education offers a social scientific analysis of some of the practices that advocates associate with liberal education such as the mentorship between faculty and student. The research on higher education can shed light on the assertions and value-based arguments from the humanities scholars. Likewise, writers like Nussbaum and Delbanco offer the conceptual, historical, and philosophical background on which many of the best practices in higher education burgeoned. Because liberal education itself has a breadth component, an interdisciplinary confluence of these two domains seems both appropriate and long overdue.

To return to Cicero, community lies at the heart of the purpose behind liberal education. It is the reason why one should be educated in the tradition as the end result is for that individual to assume leadership in the community (or the state, *res publica*, for Cicero) usually through a life of politics. The type of education familiar to Cicero, the one in which he and his colleagues were products of, involved a mentorship with one or more individuals that guided the development of youth (Everitt, 2003). This education occurred in frequently small groups, usually in the home of a wealthy individual.

In *De Officiis*, Cicero's reflections on duty, he shares the following sentiment "*non nobis solum nati sumus ortusque nostri partem patria vindicat, partem amici*" (Cicero De Officiis, 1:22). This translates as "Not for us alone are we born; our country, our friends, have a share in us." Community and how we act with regard to one another is

extremely important to his thinking. In this regard, liberal arts colleges as evidenced by their practice of liberal education take such community to heart in how they understand education, both in practice and purpose.

Throughout their history, these schools have weathered various cultural sea changes in America by emphasizing the importance of liberal education, the idea that learning occurs best through close mentorship, and the need for exploring ancient and novel concepts of what it means to be human. Currently, liberal arts colleges face criticism for high tuition prices and offering an education that does not lead to a job. It may be that these colleges and this type of close learning no longer hold as much as value in the current market place.

If we take a long view of history, liberal education's close learning style remains nothing new. As noted above, Cicero and his contemporaries were educated in small groups and lived with specific teachers. It should be noted, however, the most of the individuals educated in such a way in Roman antiquity came from wealthy families that could afford it through financial and social capital. Such education was not for everyone, but only a select few. In the 21st century, we generally (and rightfully, in my opinion) view education as something for anyone wishing to pursue it. For liberal arts colleges, this represents a challenge given their high tuition prices. It may also mean that as a model liberal arts college must find ways to hold on to this type of community and breadth and depth of study while adapting to the times.

Based on my own professional experiences and research for the dissertation, such adaptions seem entirely plausible. For example, I have seen administrative (e.g. Dean and Provost-level positions) and Dean of Students offices double or triple in size at some

institutions. I do not think the benefits of such decisions outweigh the financial costs. Likewise as faculty continue to be increasingly compartmentalized to the classroom, it seems logical to explore ways to incorporate student services (e.g. student affairs, admissions, financial aids, etc…) responsibilities into faculty work. The ideal outcome of this step would be for faculty to gain a clearer understanding of a college's administration, management, and operations as well as improve the function and transparency of shared governance. Such a step would likely take a long time to implement at an institution for the tension between faculty and administration would need to be breached. When the College of Wooster recently engaged the whole community on where the institution could save money, faculty noted skepticism about being included in administrative decisions (Gardner, 2015). Though it would not be without its challenges, training and integrating faculty to handle more administrative responsibilities would also address Roth's (2014) concern about faculty only being prepared to conduct research.

Today, the public understanding of liberal education continues to shift toward it being synonymous with frivolous or useless (Berrett, 2015) all the while small institutions dedicated to liberal arts and sciences decrease in number. To complicate matters further, the broader purpose of higher education seems to be increasingly restricted to job obtainment and employability. Thus, liberal education's commitment to educating the whole person and the view of students as citizens appears to be out of sync with the public discourse.

While the debate remains far from over, this research progresses our understanding of both liberal education and liberal arts colleges. Overall, this study highlights the importance of a close academic community as well as the breadth and

depth of study. It is nothing less than an undergraduate education that aims to help students better understand what it means to be human and to live in community. Because such topics are germane to all individuals, groups of people, cultures, contexts, and time periods, I do not think they can be deemed as antiquated, pointless, or superfluous as some critics claim. Indeed, these topics remain relevant topics to continue exploring in to the 21st century in light of what rises on the horizon.

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Appendix A

Sample set of institutions

Adrian College
Agnes Scott College
Albion College
Allegheny College
Alma College
Amherst College
Augustana College
Austin College
Barnard College
Bates College
Beloit College
Bennett College
Bethany College
Bowdoin College
Carleton College
Centre College
Claremont McKenna College
Coe College
Colby College
Colgate University
College of the Holy Cross
College of Wooster
Colorado College
Concordia College
Cornell College
Davidson College
Denison University
DePauw University
Dickinson College
Earlham College
Eckerd College
Franklin & Marshall College
Gettysburg College
Grinnell College
Guilford College
Gustavus Adolphus College
Hamilton College
Hampden-Sydney College
Hampshire College
Hanover College
Hartwick College
Haverford College
Hiram College
Hobart & William Smith College
Hope College
Illinois College
Judson College
Juniata College
Kalamazoo College
Kenyon College
Knox College
Lafayette College
Lake Forest College
Lawrence University
Luther College
Lycoming College
Macalester College
Marlboro College
Marymount Manhattan College
Monmouth College
Morehouse College
Muhlenberg College
Oglethorpe University
Ohio Wesleyan University
Pitzer College
Pomona College
Presbyterian College
Principia College
Randolph-Macon College
Reed College
Rhodes College
Ripon College
Roanoke College
Saint Mary's College
Salem College
Sarah Lawrence College
Scripps College
Shorter College
Smith College
Southwestern University
Spelman College
St. Anselm College
St. Lawrence University
St. Olaf College
Swarthmore College
Sweet Briar College
Talladega College
Tougaloo College
Transylvania College
Union College
University of the South
Ursinus College
Vassar College
Virginia Wesleyan College
Wabash College
Wartburg College
Washington & Jefferson College
Wellesley College
Wells College
Westminster College
Westmont College
Wheaton College (MA)
Whitman College
Wofford College

Appendix B

Sample demographic information

Institution name	Carnegie classification	Selectivity	State	Region	Religious affiliation	Founding year	U-CAN member
Adrian College	Bal/NGC	selective	MI	MW	United Methodist	1859	n
Agnes Scott College	A&S-F/NGC	selective	GA	SE	Presbyterian	1889	y
Albion College	A&S-F/NGC	more selective	MI	MW	Methodist	1835	y
Allegheny College	A&S-F/NGC	more selective	PA	NE	Methodist	1815	y
Alma College	A&S+Prof/NGC	selective	MI	MW	Presbyterian	1886	y
Amherst College	A&S-F/NGC	more selective	MA	NE	n/a	1821	n
Augustana College	A&S+Prof/NGC	more selective	IL	MW	n/a	1860	y
Austin College	A&S-F/NGC	more selective	TX	SE	Presbyterian	1849	y
Barnard College	A&S-F/NGC	more selective	NY	NE	n/a	1889	n
Bates College	A&S-F/NGC	more selective	ME	NE	n/a	1855	y
Beloit College	A&S-F/NGC	more selective	WI	MW	n/a	1846	n
Bennett College	A&S+Prof/NGC	n/a	NC	SE	Methodist	1873	not updated
Bethany College	A&S+Prof/NGC	n/a	WV	SE	Disciples of Christ	1840	y
Bowdoin College	A&S-F/NGC	more selective	ME	NE	n/a	1794	y
Carleton College	A&S-F/NGC	more selective	MN	MW	n/a	1866	y
Centre College	A&S-F/NGC	more selective	KY	SE	Presbyterian	1819	y
Claremont McKenna College	A&S-F/NGC	more selective	CA	West	n/a	1946	y

Institution name	Carnegie classification	Selectivity	State	Region	Religious affiliation	Founding year	U-CAN member
Coe College	A&S+Prof/NGC	more selective	IA	MW	Presbyterian	1851	y
Colby College	A&S-F/NGC	more selective	ME	NE	n/a	1813	y
Colgate University	A&S-F/NGC	more selective	NY	NE	n/a	1819	y
College of the Holy Cross	A&S-F/NGC	more selective	MA	NE	Roman Catholic	1843	y
College of Wooster	A&S-F/NGC	more selective	OH	MW	Presbyterian	1866	y
Colorado College	A&S-F/NGC	more selective	CO	West	n/a	1874	y
Concordia College	Bal/NGC	n/a	NY	NE	Lutheran	1881	not updated
Cornell College	A&S-F/NGC	more selective	IA	MW	Methodist	1853	y
Davidson College	A&S-F/NGC	more selective	NC	SE	Presbyterian	1837	n
Denison University	A&S-F/NGC	more selective	OH	MW	n/a	1831	y
DePauw University	A&S-F/NGC	more selective	IN	MW	Methodist	1837	y
Dickinson College	A&S-F/NGC	more selective	PA	NE	n/a	1773	y
Earlham College	A&S-F/NGC	more selective	IN	MW	Quaker	1847	not updated
Eckerd College	A&S+Prof/NGC	more selective	FL	SE	Presbyterian	1958	y
Franklin & Marshall College	A&S-F/NGC	more selective	PA	NE	n/a	1787	not updated
Gettysburg College	A&S-F/NGC	more selective	PA	NE	Evangelical Lutheran	1832	y
Grinnell College	A&S-F/NGC	more selective	IA	MW	n/a	1846	y
Guilford College	A&S+Prof/NGC	selective	NC	SE	Quaker	1837	y
Gustavus Adolphus College	A&S+Prof/NGC	more selective	MN	MW	Evangelical Lutheran	1862	y

Institution name	Carnegie classification	Selectivity	State	Region	Religious affiliation	Founding year	U-CAN member
Hamilton College	A&S-F/NGC	more selective	NY	NE	n/a	1812	y
Hampden-Sydney College	A&S-F/NGC	selective	VA	SE	Presbyterian	1776	y
Hampshire College	A&S-F/NGC	more selective	MA	NE	n/a	1965	n
Hanover College	A&S-F/NGC	selective	IN	MW	Presbyterian	1827	y
Hartwick College	A&S+Prof/NGC	selective	NY	NE	n/a	1797	y
Haverford College	A&S-F/NGC	more selective	PA	NE	n/a	1833	y
Hiram College	A&S+Prof/NGC	selective	OH	MW	Disciples of Christ	1850	y
Hobart & William Smith Colleges	A&S-F/NGC	more selective	NY	NE	Episcopal	1822	y
Hope College	A&S+Prof/NGC	more selective	MI	MW	Reformed Church	1862	not updated
Illinois College	A&S+Prof/NGC	selective	IL	MW	Interdenominational	1829	y
Judson College	A&S-F/NGC	selective	AL	SE	Baptist	1838	y
Juniata College	A&S+Prof/NGC	more selective	PA	NE	n/a	1876	y
Kalamazoo College	A&S-F/NGC	more selective	MI	MW	n/a	1833	y
Kenyon College	A&S-F/NGC	more selective	OH	MW	n/a	1824	y
Knox College	A&S-F/NGC	more selective	IL	MW	Presbyterian	1837	y
Lafayette College	A&S-F/NGC	more selective	PA	NE	Presbyterian U.S.A.	1826	y
Lake Forest College	A&S-F/NGC	more selective	IL	MW	n/a	1857	y
Lawrence University	A&S-F/NGC	more selective	WI	MW	n/a	1847	y
Luther College	A&S+Prof/NGC	more selective	IA	MW	Evangelical Lutheran	1861	y

Institution name	Carnegie classification	Selectivity	State	Region	Religious affiliation	Founding year	U-CAN member
Lycoming College	A&S-F/NGC	selective	PA	NE	Methodist	1812	y
Macalester College	A&S-F/NGC	more selective	MN	MW	Presbyterian	1874	y
Marlboro College	A&S-F/NGC	more selective	VT	NE	n/a	1947	y
Marymount Manhattan College	A&S-F/NGC	selective	NY	NE	n/a	1936	not updated
Monmouth College	Bal/NGC	selective	IL	MW	Presbyterian	1853	y
Morehouse College	A&S+Prof/NGC	selective	GA	SE	n/a	1867	n
Muhlenberg College	A&S+Prof/NGC	more selective	PA	NE	Lutheran	1848	y
Oglethorpe University	A&S+Prof/NGC	more selective	GA	SE	n/a	1835	not updated
Ohio Wesleyan University	A&S+Prof/NGC	more selective	OH	MW	Methodist	1842	y
Pitzer College	A&S-F/NGC	more selective	CA	West	n/a	1963	n
Pomona College	A&S-F/NGC	more selective	CA	West	n/a	1887	y
Presbyterian College	A&S+Prof/NGC	selective	SC	SE	Presbyterian	1880	y
Principia College	A&S-F/NGC	selective	IL	MW	Christian Science	1910	n
Randolph-Macon College	A&S-F/NGC	selective	VA	SE	Methodist	1830	y
Reed College	A&S-F/NGC	more selective	OR	West	n/a	1909	y
Rhodes College	A&S-F/NGC	more selective	TN	SE	Presbyterian	1848	not updated
Ripon College	A&S+Prof/NGC	selective	WI	MW	n/a	1851	not updated
Roanoke College	A&S+Prof/NGC	selective	VA	SE	Evangelical Lutheran	1842	y
Saint Mary's College	A&S-F/NGC	more selective	IN	MW	Roman Catholic	1844	y
Salem	A&S-F/NGC	selective	NC	SE	Moravian	1772	n

Institution name	Carnegie classification	Selectivity	State	Region	Religious affiliation	Founding year	U-CAN member
College							
Sarah Lawrence College	A&S-F/NGC	n/a	NY	NE	n/a	1926	y
Scripps College	A&S-F/NGC	more selective	CA	West	n/a	1926	y
Sewanee: University of the South	A&S-F/NGC	more selective	TN	SE	Episcopal	1857	y
Shorter College	Bal/NGC	selective	GA	SE	Baptist	1873	n
Southwestern University	A&S-F/NGC	more selective	TX	SE	Methodist	1840	y
Spelman College	A&S-F/NGC	selective	GA	SE	n/a	1881	n
St. Anselm College	A&S+Prof/NGC	selective	NH	NE	Roman Catholic	1889	not updated
St. Lawrence University	A&S-F/NGC	more selective	NY	NE	n/a	1856	y
St. Olaf College	A&S-F/NGC	more selective	MN	MW	Lutheran	1874	y
Swarthmore College	A&S-F/NGC	more selective	PA	NE	n/a	1864	y
Sweet Briar College	A&S-F/NGC	selective	VA	SE	n/a	1901	y
Talladega College	A&S+Prof/NGC	n/a	AL	SE	n/a	1867	n
Tougaloo College	A&S-F/NGC	more selective	MS	SE	Interdenominational	1869	n
Transylvania College	A&S+Prof/NGC	more selective	KY	SE	Disciples of Christ	1780	y
Union College	A&S-F/NGC	more selective	NY	NE	n/a	1795	y
Ursinus College	A&S-F/NGC	more selective	PA	NE	United Church of Christ	1869	y
Vassar College	A&S-F/NGC	more selective	NY	NE	n/a	1861	y

Institution name	Carnegie classification	Selectivity	State	Region	Religious affiliation	Founding year	U-CAN member
Virginia Wesleyan College	Bal/NGC	selective	VA	SE	Methodist	1961	n
Wabash College	A&S-F/NGC	selective	IN	MW	n/a	1832	n
Wartburg College	Bal/NGC	selective	IA	MW	Lutheran	1852	y
Washington & Jefferson College	A&S+Prof/NGC	more selective	PA	NE	n/a	1781	y
Wellesley College	A&S-F/NGC	more selective	MA	NE	n/a	1870	n
Wells College	A&S-F/NGC	selective	NY	NE	n/a	1868	y
Westminster College	Bal/NGC	selective	MO	MW	Presbyterian	1851	y
Westmont College	A&S+Prof/NGC	more selective	CA	West	n/a	1940	n
Wheaton Collegec (MA)	A&S-F/NGC	more selective	MA	NE	n/a	1834	y
Whitman College	A&S-F/NGC	more selective	WA	West	n/a	1859	y
Wofford College	A&S+Prof/NGC	more selective	SC	SE	Methodist	1854	y

Appendix C

Sample set faculty-student data

Institution name	Faculty-student ratios	Faculty full time raw numbers	Faculty part time raw numbers	% of FT faculty	Student raw numbers
Adrian College	14:1	91	86	51.41%	1804
Agnes Scott College	11:1	70	32	68.63%	885
Albion College	11:1	115	32	78.23%	1382
Allegheny College	12:1	168	39	81.16%	2140
Alma College	12:1	95	79	54.60%	1461
Amherst College	8:1	219	28	88.66%	1817
Augustana College	12:1	186	0	100.00%	2551
Austin College	12:1	94	29	76.42%	1260
Barnard College	10:1	208	124	62.65%	2504
Bates College	10:1	166	33	83.42%	1753
Beloit College	11:1	111	23	82.84%	1330
Bennett College	10:1	63	26	70.79%	707
Bethany College	14:1	48	31	60.76%	842
Bowdoin College	9:1	206	37	84.77%	1839
Carleton College	9:1	235	40	85.45%	2055
Centre College	11:1	121	16	88.32%	1344
Claremont McKenna College	8:1	163	18	90.06%	1295
Coe College	11:1	97	76	56.07%	1367
Colby College	10:1	173	56	75.55%	1863
Colgate University	9:1	308	11	96.55%	2886
College of the Holy Cross	10:1	270	49	84.64%	2926

Institution name	Faculty-student ratios	Faculty full time raw numbers	Faculty part time raw numbers	% of FT faculty	Student raw numbers
College of Wooster	11:1	170	41	80.57%	2080
Colorado College	10:1	179	29	86.06%	2004
Concordia College	13:1	42	95	30.66%	830
Cornell College	12:1	96	61	61.15%	1180
Davidson College	10:1	169	7	96.02%	1790
Denison University	10:1	230	57	80.14%	2339
DePauw University	10:1	225	40	84.91%	2336
Dickinson College	10:1	219	58	79.06%	2386
Earlham College	10:1	103	7	93.64%	1196
Eckerd College	13:1	121	77	61.11%	2337
Franklin & Marshall College	9:1	245	51	82.77%	2365
Gettysburg College	10:1	220	92	70.51%	2600
Grinnell College	9:1	195	43	81.93%	1674
Guilford College	15:1	124	65	65.61%	2462
Gustavus Adolphus College	12:1	190	43	81.55%	2526
Hamilton College	9:1	204	22	90.27%	1884
Hampden-Sydney College	11:1	104	9	92.04%	1080
Hampshire College	12:1	136	0	100.00%	1461
Hanover College	12:1	94	5	94.95%	1123
Hartwick College	11:1	109	74	59.56%	1558

Institution name	Faculty-student ratios	Faculty full time raw numbers	Faculty part time raw numbers	% of FT faculty	Student raw numbers
Haverford College	8:1	121	30	80.13%	1205
Hiram College	11:1	84	65	56.38%	1324
Hobart & William Smith Colleges	11:1	201	13	93.93%	2300
Hope College	12:1	240	112	68.18%	3343
Illinois College	11:1	80	23	77.67%	987
Judson College	9:1	28	25	52.83%	357
Juniata College	13:1	103	60	63.19%	1558
Kalamazoo College	14:1	100	16	86.21%	1379
Kenyon College	9:1	166	17	90.71%	1667
Knox College	11:1	119	34	77.78%	1430
Lafayette College	10:1	223	35	86.43%	2488
Lake Forest College	12:1	99	68	59.28%	1552
Lawrence University	9:1	168	36	82.35%	1518
Luther College	12:1	182	64	73.98%	2473
Lycoming College	14:1	82	38	68.33%	1354
Macalester College	10:1	174	61	74.04%	2070
Marlboro College	6:1	43	38	53.09%	294
Marymount Manhattan College	10:1	98	204	32.45%	1936
Monmouth College	14:1	85	44	65.89%	1242
Morehouse College	13:1	164	59	73.54%	2374
Muhlenberg College	12:1	346	121	74.09%	2422
Oglethorpe University	14:1	56	45	55.45%	1053
Ohio Wesleyan University	11:1	143	63	69.42%	1819

Institution name	Faculty-student ratios	Faculty full time raw numbers	Faculty part time raw numbers	% of FT faculty	Student raw numbers
Pitzer College	11:1	86	31	73.50%	1084
Pomona College	7:1	211	47	81.78%	1607
Presbyterian College	13:1	100	27	78.74%	1172
Principia College	7:1	67	10	87.01%	489
Randolph-Macon College	12:1	98	56	63.64%	1312
Reed College	10:1	142	13	91.61%	1432
Rhodes College	10:1	170	33	83.74%	1915
Ripon College	11:1	69	32	68.32%	931
Roanoke College	11:1	169	47	78.24%	2060
Saint Mary's College	10:1	134	72	65.05%	1469
Salem College	12:1	59	60	49.58%	945
Sarah Lawrence College	10:1	104	193	35.02%	1420
Scripps College	10:1	85	34	71.43%	945
Sewanee: University of the South	10:1	143	0	100.00%	1509
Shorter College	13:1	85	71	54.49%	1440
Southwestern University	10:1	120	2	98.36%	1394
Spelman College	11:1	174	77	69.32%	2145
St. Anselm College	11:1	144.0	63.0	69.57%	1954
St. Lawrence University	12:1	183	52	77.87%	2398
St. Olaf College	12:1	233	85	73.27%	3176
Swarthmore College	8:1	194	34	85.09%	1552
Sweet Briar College	8:1	84	19	81.55%	723
Talladega College	15:1	36	22	62.07%	1203
Tougaloo College	11:1	255	23	91.73%	972

Institution name	Faculty-student ratios	Faculty full time raw numbers	Faculty part time raw numbers	% of FT faculty	Student raw numbers
Transylvania College	11:1	93	16	85.32%	1074
Union College	10:1	207	32	86.61%	2241
Ursinus College	11:1	129	56	69.73%	1680
Vassar College	8:1	279	52	84.29%	2406
Virginia Wesleyan College	12:1	91	32	73.98%	1431
Wabash College	10:1	87	4	95.60%	906
Wartburg College	11:1	108	74	59.34%	1747
Washington & Jefferson College	11:1	113	39	74.34%	1429
Wellesley College	8:1	331	100	76.80%	2482
Wells College	10:1	39	28	58.21%	532
Westminster College	14:1	59	33	64.13%	1092
Westmont College	12:1	96	66	59.26%	1343
Wheaton Collegec (MA)	11:1	131	49	72.78%	1616
Whitman College	9:1	173	86	66.80%	1539
Wofford College	12:1	124	32	79.49%	1619

Appendix D

Sample set class size distribution & percentage of students living on campus

Data from U-Can institution profiles

Institution name	Class size: 2-19	Class size: 20-39	Class size: 40-99	Class size: 100+	Total	% living on campus	U-CAN member
Adrian College							n
Agnes Scott College	148	60	0	0	208	82	y
Albion College	229	95	5	0	329	89	y
Allegheny College	321	160	20	0	501	90	y
Alma College	269	99	13	0	381	90	y
Amherst College							n
Augustana College	323	162	17	0	502	68	y
Austin College	201	93	10	0	304	78	y
Barnard College							n
Bates College	272	96	32	0	400	93	y
Beloit College							n
Bennett College	n/a	n/a	n/a	n/a	n/a	70	not updated
Bethany College	198	49	2	0	249	99	y
Bowdoin College	293	101	20	0	414	92	y
Carleton College	224	106	9	0	339	96	y
Centre College	183	123	0	0	306	96	y
Claremont McKenna College	250	38	6	0	294	94	y
Coe College	262	95	5	0	362	86	y

Institution name	Class size: 2-19	Class size: 20-39	Class size: 40-99	Class size: 100+	Total	% living on campus	U-CAN member
Colby College	301	111	19	0	431	96	y
Colgate University	425	200	14	1	640	92	y
College of the Holy Cross	367	182	19	0	568	92	y
College of Wooster	401	148	13	1	621	99	y
Colorado College	281	154	1	0	436	76	y
Concordia College	n/a	n/a	n/a	n/a	n/a	n/a	not updated
Cornell College	194	81	0	0	275	92	y
Davidson College							n
Denison University	513	185	3	0	701	99	y
DePauw University	340	184	1	0	525	96	y
Dickinson College	467	140	5	0	612	96	y
Earlham College	200	49	16	0	265	96	not updated
Eckerd College	169	192	15	0	376	85	y
Franklin & Marshall College	307	233	3	0	543	99	not updated
Gettysburg College	408	174	16	0	599	93	y
Grinnell College	279	126	3	0	408	88	y
Guilford College	208	174	0	0	382	77	y
Gustavus Adolphus College	323	190	29	0	542	97	y
Hamilton College	338	106	16	0	460	97	y

Institution name	Class size: 2-19	Class size: 20-39	Class size: 40-99	Class size: 100+	Total	% living on campus	U-CAN member
Hampden-Sydney College	296	107	1	0	404	96	y
Hampshire College							n
Hanover College	232	77	4	0	313	96	y
Hartwick College	270	160	6	1	437	77	y
Haverford College	292	59	4	0	355	96	y
Hiram College	293	85	0	0	378	n/a	y
Hobart & William Smith Colleges	366	188	6	0	560	90	y
Hope College	418	297	28	0	743	81	not updated
Illinois College	171	63	11	0	245	81	y
Judson College	129	22	0	0	151	56	y
Juniata College	235	95	11	2	343	79	y
Kalamazoo College	108	65	7	0	180	61	y
Kenyon College	279	127	10	0	416	99	y
Knox College	197	57	8	0	262	86	y
Lafayette College	293	185	19	0	497	92	y
Lake Forest College	184	116	7	0	307	n/a	y
Lawrence University	269	68	15	1	1106	92	y
Luther College	290	217	13	1	521	84	y
Lycoming College	179	97	8	3	287	87	y

Institution name	Class size: 2-19	Class size: 20-39	Class size: 40-99	Class size: 100+	Total	% living on campus	U-CAN member
Macalester College	312	119	7	0	438	64	y
Marlboro College	134	1	0	0	135	88	y
Marymount Manhattan College	380	274	18	0	672	39	not updated
Monmouth College	n/a	n/a	n/a	n/a	n/a	92	y
Morehouse College							n
Muhlenberg College	452	172	9	2	635	92	y
Oglethorpe University	n/a	n/a	n/a	n/a	n/a	n/a	not updated
Ohio Wesleyan University	318	147	1	0	466	94	y
Pitzer College							n
Pomona College	270	111	15	0	396	96	y
Presbyterian College	207	127	2	0	336	99	y
Principia College							n
Randolph-Macon College	265	102	1	0	368	78	y
Reed College	193	58	12	2	265	67	y
Rhodes College	313	172	10	0	495	71	not updated
Ripon College	172	70	7	0	249	87	not updated
Roanoke College	270	195	6	0	471	78	y
Saint Mary's College	239	173	7	0	419	91	y
Salem College							n

Institution name	Class size: 2-19	Class size: 20-39	Class size: 40-99	Class size: 100+	Total	% living on campus	U-CAN member
Sarah Lawrence College	359	20	9	0	388	82	y
Scripps College	155	27	1	1	184	96	y
Sewanee: University of the South	220	138	5	0	363	96	y
Shorter College							n
Southwestern University	294	116	4	0	414	77	y
Spelman College							n
St. Anselm College	241	153	17	4	415	90	not updated
St. Lawrence University	325	175	10	0	510	n/a	y
St. Olaf College	321	236	34	3	594	92	y
Swarthmore College	280	76	17	1	374	94	y
Sweet Briar College	208	27	1	0	236	96	y
Talladega College							n
Tougaloo College							n
Transylvania College	218	76	0	0	294	75	y
Union College	254	95	2	0	351	86	y
Ursinus College	496	109	5	1	611	95	y
Vassar College	372	204	8	0	584	95	y
Virginia Wesleyan College							n
Wabash College							n

Institution name	Class size: 2-19	Class size: 20-39	Class size: 40-99	Class size: 100+	Total	% living on campus	U-CAN member
Wartburg College	196	176	17	1	390	83	y
Washington & Jefferson College	223	118	2	0	343	94	y
Wellesley College							n
Wells College	185	40	3	0	228	84.4	y
Westminster College	212	115	0	0	327	85	y
Westmont College							n
Wheaton Collegec (MA)	239	87	0	0	326	97	y
Whitman College	211	92	13	2	318	67	y
Wofford College	247	173	3	0	423	93	y

Appendix E

Survey

Letter to liberal arts college administrators for transactional validity

Subject: Liberal education survey request for dissertation research

Dear [name]

I hope this e-mail finds you well. My name is Jason Jones, and I am conducting dissertation research on building a contemporary pragmatic definition of liberal education with the advisement of Dr. David Breneman at the University of Virginia. The first phase of data collection consisted of document analysis of online webpages of liberal arts colleges. [name of institution] was among those schools. As a leader of a liberal arts college in the sample, I believe you have valuable insight into this research. I write to you today with a request that you participate in the second phase of my research. I have attached a link to a six-question survey seeking your perceptions of the most salient traits of liberal education at liberal arts colleges today. The survey should take approximately 5-10 minutes of your time.

If agreeable and convenient with your schedule, you may click here [hyperlink to survey] or copy and paste this address _____ to access the survey on liberal education. If you have any questions, concerns, or comments, please do not hesitate to contact me (jsj6y@virginia.edu) or David Breneman (dwb8n@virginia.edu).

Thank you in advance for your consideration and time,

Jason Jones

Survey (page one)
You are invited to participate in our survey on liberal education. This survey is based on findings from dissertation research conducted by Jason Jones at the University of Virginia under the advisement of Dr. David Breneman. The primary purpose of this dissertation research is to construct a pragmatic definition of liberal education. Due to liberal arts colleges single mission activity of liberal education, institutional practices of a sample of liberal arts colleges provide the practical definition. As a leader of an institution in the sample set, your input will provide valuable data to this research.

Your participation in this study is completely voluntary. There are no foreseeable risks

associated with this project. However, if you feel uncomfortable answering any questions, you can withdraw from the survey at any point. It is very important for us to learn your opinions. Your survey responses will be strictly confidential. Your information will be coded and remain confidential.

If you have questions at any time about the survey or the procedures, you may contact Mr. Jason Jones at jsj6y@virginia.edu or Dr. David Breneman at dwb8n@virginia.edu.

Thank you very much for your time and support. Please start with the survey now by clicking on the Continue button below.

If you have questions about your rights in the study, contact:
IRB-SBS #2014-0382
Tonya R. Moon, Ph.D.,
Chair, Institutional Review Board for the Social and Behavioral Sciences
One Morton Dr Suite 500
University of Virginia, P.O. Box 800392
Charlottesville, VA 22908-0392
Telephone: (434) 924-5999
Email: irbsbshelp@virginia.edu
Website: www.virginia.edu/vpr/irb
Refer to this as SBS Protocol #2013-0382

Survey (page two)

1) Name of institution where you attended as an undergraduate (please no abbreviations)

2) The following components were most commonly represented in the analysis of liberal arts college webpages. Based on your experience and knowledge, please rank these components in order of importance in the practice of liberal education:

- Engagement with faculty and staff (e.g. small classes, low faculty-student ratios, frequent interactions, etc...) _____
- Collaboration and commitment within the campus community _____
- Co- or extra-curriculars _____
- Students taking classes in specific disciplines _____
- Students taking classes centered around a theme (e.g. quantitative reasoning) or topic (e.g. diversity) _____
- Presence of an honor code or other formalized academic and/or social integrity statement(s) _____
- A commitment to student residential life on campus _____

3) Based on your experience and knowledge, please state any aspects or components essential to

liberal education not mentioned in the list above.

4) What, if anything, is distinctive about community at liberal arts colleges?

5) What distinguishes liberal education at a liberal arts college from other schools claiming to operate in that tradition?

6) One of the drivers of this research is about how liberal education is provided today in higher education. From your experience and knowledge, what is most important about liberal arts colleges today?

7) Additional comments/suggestions: