Enrollment Growth Strategies for the Contemporary Liberal Arts College

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Abstract

Small, private, liberal arts colleges face challenges in enrolling first-year students due to demographic trends impacting their target populations and unsustainable financial aid allocation strategies. Marietta College, located in Marietta, Ohio, epitomizes this dynamic as they embark on a set of strategic efforts to grow their first-year cohort and total student population. Our quantitative and qualitative research and analysis of this institution's enrollment management work focuses on three areas of interest: the relationship between financial aid and enrollment, specifically for out-of-state students; how campus visitation impacts enrollment; and how website user experience influences enrollment.

Key analytic findings included, among others, the ideal range of students most likely to yield at Marietta College based on a review of historical applicant data, a statistically significant relationship between campus visitation and enrollment, insight into the factors influencing students to ultimately choose Marietta College, and qualitative feedback from prospective college students on their user experience with the institution's website. Lastly, we offer a series of strategic recommendations for Marietta College leadership to consider across four distinct areas: ideal student population(s) to target, recruitment strategy, campus tours and other on-campus programming, and website and virtual engagement. While limited in scope and generalizability, we anticipate our findings and recommendations will add to the existing knowledge base for similarly situated institutions facing enrollment growth challenges.

Keywords: liberal arts colleges, college choice, campus visitation, website user experience, enrollment management, student yield, tuition discounting, college admissions

Executive Summary

Marietta College, a small, private, liberal arts college in Marietta, Ohio, seeks to increase its first-year undergraduate cohort from 425 to 525 students by the year 2025 with a specific goal of moving from 425 to 450 students during the 2021-2022 academic year. This project is part of a broader set of strategic initiatives to expand total student enrollment to 2,500 within the same timeframe by attracting and retaining new freshman, transfer, continuing, and graduate students (Strategic Priorities, 2018). The scope of this project includes an assessment of current admissions recruitment strategies and programming, the identification of promising geographic recruitment markets, and a reevaluation of Marietta College's recruitment marketing tactics, including their official website, all to ensure optimal targeting of prospective students most likely to enroll at Marietta.

Generating new tuition revenue is a primary driver of this project as Marietta College, like many other small, private liberal arts colleges, faces ongoing demographic trends that threaten their financial future, including a declining number of high school graduates and increased competition for students among peer schools. As a result, Marietta College is seeking creative ways to attract and retain students in order to increase operating revenues, which will enable it to prioritize financial resources towards its mission and strategic priorities. Despite their best efforts at attracting prospective students, enrollment yield at Marietta College has remained below 20 percent over the previous five admissions cycles. This trend is due to several regional and institutional challenges that have only been exacerbated by the COVID-19 pandemic.

Our research and analysis revolved around three central research questions that were accompanied by several sub-questions of interest:

1. To what extent does an increase in financial aid package offer increase the probability of enrollment for out-of-state students at Marietta College?

    a. Which academic course offerings are most attractive to out-of-state applicants to Marietta College?

    b. For admitted students who enroll somewhere other than Marietta College, which academic course of study are they choosing?

    c. What are the range of students most likely to yield at Marietta College based on the combination of academic quality (SAT and/or ACT score, HS GPA, HS rigor) and financial aid package offered?

2. What is the relationship between student campus visitation and enrollment at Marietta College?

    a. For currently enrolled first-year students who visited Marietta prior to enrolling, which elements of the visit experience were most associated with students applying and ultimately enrolling at Marietta College?

3. Using a narrative analysis, what is the user experience (UX) of prospective college students navigating Marietta College's website?

A mixed-methods research approach combining quantitative analysis and qualitative inquiry was employed to address the unique needs of Marietta College and their strategic goals of increasing student enrollment. Our methodology, dependent on the research question, included the review of institutional data, student and staff interviews, website observations, and user performance tasks. To answer the first research question and sub-questions of interest, we conducted a quantitative study examining Marietta College applicant data from 2015-2020 to determine the ideal applicant range based on a student's academic quality and the financial aid

package amount needed to yield more out-of-state, first-year students at Marietta College. To answer the second research question, we executed a mixed-methods approach via qualitative interviews with current first-year students and analyzed registration records for campus visits from 2015-2020 to examine the relationship between campus visitation and a student's likelihood of enrollment at Marietta College. The third research question focuses on the user experience (UX) of prospective college students as they navigate the Marietta College website, specifically focusing on their "future student" resources.

While our analysis of available data did not allow for any definitive conclusions about the influence of financial aid on the enrollment of out-of-state students at Marietta College, we were able to determine a list of nine academic majors that were most attractive to this population of students. We also draw some reasonable conclusions about the academic major choices of students admitted to Marietta College who enroll at other colleges and universities, namely that the relative ranking of overlapping programs and the lack of certain academic specialty areas leads them to choose elsewhere. Other quantitative findings include guidance on the population of students most likely to yield at Marietta based on a combination of academic, demographic, and financial factors. Further statistical analysis revealed a statistically significant relationship between campus visitation and enrollment, in addition to a thematic overview of the most important factors for students in selecting Marietta College. Lastly, we propose a series of recommendations across four distinct focus areas for senior leadership at Marietta College to consider related to their enrollment management strategy in the coming years: ideal student population(s) to target, recruitment strategy, campus tours and other on-campus programming, and website and virtual engagement.

We anticipate that the findings of our research, as well as the recommendations, will add to the existing literature on best practices for small, private, liberal arts colleges facing challenges related to enrollment growth. Prior to the onset of the COVID-19 pandemic, demographic shifts in the college-going population and increasing competition for students created tremendous pressure on the financial model of these types of institutions, many of which were already highly tuition-dependent. As colleges like Marietta refocus their efforts to attract new student populations and maintain relevance in the higher education marketplace, we expect that insights from our work could potentially assist in that regard. While our findings may be somewhat limited in generalizability beyond Marietta, the research design and methods we employed can be replicated to address the unique needs of a similarly situated campus.

Problem of Practice

Higher education institutions of all types are facing increased scrutiny to improve rates of enrollment, retention, and graduation of students as the states in which they reside look to enhance the quality of education for their citizens and improve the quality of their overall workforce (Ma, Pender & Welch, 2013). Educational attainment is a key pathway to upward mobility within the United States as individuals with higher levels of education earn more, pay more taxes, and are less likely than those with lower levels of education to be unemployed; a college education is also associated with healthier lifestyles and more actively engaged citizens (Ma, Pender & Welch, 2013). These are all factors that contribute to a more educated society that can compete in the global market. Even with the increased awareness of the benefits of educational attainment within the United States, there has been a steady decline in post-secondary attainment (National Student Clearinghouse Research Center, 2019). This decline

simultaneously impacts national and state-level educational attainment efforts, as well as the

financial stability of colleges and universities.

A Decline in National Student College Enrollment

The enrolled college student population in the United States has declined by 2.3 million

people since 2011 while total post-secondary enrollment continued to decline by 1.3 percent

across every institutional sector in fall 2019 (National Student Clearinghouse Research Center,

2019). One of the major drivers of this enrollment decline is the rise in college costs, often

exacerbated by state-level disinvestment in higher education which forces institutions to increase

their reliance on tuition to close budget gaps (National Student Clearinghouse Research Center,

2019). Without adequate outside funding to offset rising tuition costs, students are often faced

with two difficult choices: opt out of enrolling altogether to avoid the financial burden of college

or drop out once the cost becomes too great. This downward trend overwhelmingly impacts

small, private, liberal arts colleges like Marietta, many of whom already struggle to fill their

incoming classes. The consequence of this cycle has been a recent wave of closures, mergers,

and strategic partnerships between liberal arts colleges and larger education providers in order to

remain financially viable. Therefore, institutions must find innovative ways to enroll and retain

both new and current students, if for no other reason than their financial models depend on it.

Overuse of Tuition Discounting Practices

Colleges and universities commonly resort to tuition discounting as a strategy to enroll

first-year students. While this approach can be effective in yielding high-achieving students to

campus, overuse can negatively impact a school's ability to generate adequate levels of tuition

revenue. Small, private colleges like Marietta are significantly impacted by the use of this practice. In a 2019 study, researchers found that about 366 private, non-profit colleges and universities surveyed reported an estimated 52.6% average institutional tuition discount rate for first-time-in-college (FTIC) students (Daugherty, 2020). This means that institutions waive roughly half the revenue they would have otherwise collected had they charged students full price on tuition. This practice has drastically impacted small, private institutions as many of them struggle to increase student enrollment and net revenue. Participating colleges reported a 0.8 percentage loss in net tuition revenue for FTIC students. This equates to a 3.6 percent decline in revenue after adjusting for inflation (Daugherty, 2020). These types of tuition discount strategies are not sustainable, especially when coupled with the dual financial impacts of the national decline in student college enrollment and COVID-19.

Capstone Site Description

Founded in 1835, Marietta College is a private, co-educational, non-sectarian, undergraduate liberal arts college situated on a 90-acre residential campus in Marietta, Ohio (Marietta College, 2020). Located in southeastern Ohio with a population of roughly 14,000, the city of Marietta is part of the Mid-Ohio Valley metropolitan area and this geographic location within greater Ohio puts the college within close proximity of many of its athletic and academic peer institutions.

Approximately 1,130 students enrolled at Marietta College during the most recent academic year, 1,052 of which were undergraduate students (U.S. News & World Report, 2020). Marietta primarily enrolls a traditional college-aged population as 94% of undergraduate students are 24 years old or younger with the bulk coming from Ohio, West Virginia,

Pennsylvania, and the greater Northeastern United States (National Center for Education

Statistics, 2019). Among its enrolled undergraduate population, Marietta maintains a roughly

even male/female gender ratio with the following racial/ethnic gender breakdown: 71% White,

13% Non-Resident Alien, 4% Black/African-American, 4% Race/Ethnicity Unknown, 3%

Hispanic/Latino, 3% Two or More Races, 1% Asian (National Center for Education Statistics,

2019). 71% of 2,923 undergraduate applicants to Marietta in fall 2019 were admitted, 17% of

which ultimately enrolled with median SAT and ACT scores between 920-1250 and 19-26

respectively (National Center for Education Statistics, 2019). From a student success standpoint,

Marietta's 2019 first-year retention rate was 70% with four and eight-year graduation rates of

47% and 64% respectively (U.S. Department of Education, 2020; U.S. News & World Report,

2020).

The total cost of attendance at Marietta College for the 2020-2021 academic year totaled

$51,674, which includes tuition and fees, room and board, books and supplies, travel, and

personal expenses (Marietta College, 2020). However, the average net price to attend is much

lower at $19,973 (U.S. Department of Education, 2020). Over the past academic year, roughly

70% of first-time, full-time undergraduates received federal aid to finance their education at

Marietta and 33% received a Federal Pell Grant based on family income status (U.S. Department

of Education, 2020). Marietta also awarded over $17.5 million dollars in need-based financial aid

to 95% of enrolled students with an average grant award of $28,541 (U.S. News & World

Report, 2020; Marietta College, 2020). The median total debt for Marietta College graduates is

roughly $27,000 with a three-year loan default rate of 4.4% for the 2015 entering cohort, a figure

that is significantly lower than the national average of 10.8% (U.S. Department of Education,

2020; Marietta College, 2020).

Marietta College is accredited by the Higher Learning Commission and grants Bachelor of Arts, Bachelor of Science, Bachelor of Fine Arts, and Bachelor of Music degrees in 52 different academic areas spread across the Arts & Humanities, Natural, and Social Sciences, in addition to four Master's degree programs. The student to faculty ratio at Marietta is 9:1 and 84% of the 111 faculty members at the institution hold a terminal degree in their respective field (Marietta College, 2020). Just over 85% of classes at Marietta have less than 20 students with an average class size of 13 (Marietta College, 2020; U.S. News & World Report, 2020). According to reporting by the U.S. Department of Education's College Scorecard (2020), the ten most popular undergraduate majors at Marietta by enrollment are:

Petroleum Engineering

Natural Resources Management and Policy

Finance and Financial Management Services

Teacher Education and Professional Development

Accounting and Related Services

Geological and Earth Sciences/Geosciences

Public Relations, Advertising, and Applied Communication

General Psychology

Health and Physical Education/Fitness

Marketing

Like many other similarly situated institutions, Marietta College prides itself on a strong academic environment and an individualized, whole-person developmental experience facilitated by small class sizes in a close-knit, rural environment. In terms of national reputation, Marietta was recognized in U.S. News & World Report's 2020 College Rankings as the 10th best Regional Midwestern College, 8th among Best Value Schools, and 34th among Top Performers on Social Mobility (U.S. News & World Report, 2020). Other recent accolades include recognition in the following national publications: Peterson's Competitive Colleges, Princeton Review's Best

Midwestern Colleges, Barron's Best Buys in College Education, and Forbes Magazine's Best in the Nation college rankings (Marietta College, 2020).

Financial Overview & Current Challenges

A Decline in Tuition Revenue

After several consecutive years of enrollment decline, total student enrollment at Marietta College has increased over the last two years, rising to a total of 1,130 in fall 2019. However, tuition revenue has declined over that same period due to increasingly aggressive tuition discounting. This practice is common among small, private colleges like Marietta who lack excess student demand and must offer more institutional financial aid in order to lure students to campus. Since 2017, the amount of tuition revenue generated has fallen from $22,746,252 to $16,983,101 in 2019, a drop that significantly impacts the institution's ability to fund core academic functions and other campus-wide initiatives. Furthermore, tuition and fees were held steady from 2017-18 through the 2019-20 academic years, most likely as a competitive move to entice students to both enroll and retain at the college (Perry, 2018). As Marietta seeks to continue the positive enrollment trajectory from recent years, it is imperative that growing tuition revenue is a priority, either through enrollment of more students who pay full tuition costs, a reduction in the tuition discount rate, reallocation of institutional dollars towards need or merit-based financial aid, or some combination of each strategy.

Growth in Expenses

Coupled with the decline in tuition revenue, Marietta has also seen its expenses grow significantly over the past two years, increasing from $57,845,233 in 2018-19 to $67,651,627 in 2019-20. Some of this growth is likely linked to COVID-19 as the institution shifted to remote

learning in spring 2020, in addition to average annual growth in areas like salaries and wages, employee benefits, and utilities and maintenance. Between 2017 and 2018, there was also a noticeable uptick across three areas that contributed to the overall expense growth trend: instructional costs ($16,777,228 in 2017 vs. $19,762,358 in 2018), academic support ($4,252,045 in 2017 vs. $4,772,157 in 2018), and student services ($7,271,372 in 2017 vs. $9,419,307 in 2018). A reasonable explanation for the rise in these cost areas could be that the institution is taking steps to address overall student retention more broadly and its four-year graduation specifically, which is just shy of 50%. Moving forward, cost containment in these and other areas must be thoughtfully addressed as Marietta seeks to bolster its long-term viability.

Major Decline in Cash and Cash Equivalents

Cash and cash equivalents have declined precipitously in the preceding three years at Marietta, down to $3,148,475 in 2019 from a previous high of $26,467,733 in 2018. The downward trend in this area coincides with a broader dip in net assets from $9,506,608 in 2017 to $4,293,517 in 2018. A reduction in gains on investments has been a primary driver in this decline, in addition to an almost $3 million dollar growth in capital expenditures from 2017 to 2018. Reversing this negative directional growth trend must be central to the strategic changes made by Marietta in the near term.

Endowment Growth

A positive highlight from the financial analysis of Marietta College is the recent increase in the institutional endowment, which has grown from $83,580,253 in 2018 to $88,469,294 in 2019. Furthermore, institutional projections suggest continued growth up to $89,083,833 for the

2020-21 academic year. Increasing the endowment is one of Marietta's highest priority initiatives as work has been ongoing to reach 100 million dollars, in addition to reducing the endowment spending rate from 5.5 to 4.5 percent, both by the end of 2020 (Endowment Support, 2020). Ensuring that this positive trend continues will provide a financial cushion for Marietta to invest in core academic areas and other strategic priorities without risking financial stability elsewhere throughout the institution.

Current Recruitment Strategies & Challenges

Our analysis of the student enrollment landscape at Marietta College included interviews with members of the Enrollment Management team to better understand their strategic approach to attracting students and the challenges inherent to the institution within that work. Marietta College actively recruits students within a three to three and half hour radius from its campus and their focus is primarily on geographic markets where admitted students have successfully yielded in the past and where ideally positioned college fairs are taking place. With some allowance for year-to-year variance, Marietta looks to recruit students who fit the following profile: students who have a strong background in community service, who are organizationally involved within their high school, and who fall within the B+/A- range in terms of overall academic achievement. Prospective student-athletes are also common within the applicant pool as roughly 50 percent of the most recent incoming class intended to compete in intercollegiate athletics while enrolled at Marietta.

Each member of the Enrollment Management team at Marietta with recruitment responsibility is tasked with canvassing a particular region within Ohio, as well as select out-of-state territories. To facilitate their efforts, each individual is expected to create a student

recruitment plan for each admissions cycle which outlines the geographic markets they intend to target and the various strategies they will use for outreach to prospective students and high school counselors. In terms of off-campus recruitment programming, in-person high school visits and attendance at college fairs have remained staples of Marietta's strategic efforts to attract students. Campus tours and information sessions, as well as visit days targeted at priority populations of students based on identity or academic interest, e.g. Fly-In Program, STEM, Music, Education, etc., also round out the on-campus recruitment programming slate for prospective audiences. However, the COVID-19 pandemic required a shift to a series of virtual programs, which included the following:

- **Virtual high school visits**

- **Virtual campus tours**

- **Admission 101 Webinar Series** - A virtual presentation on Marietta College and the process of applying for admission there.

- **Prospective Student Webinar Series** - A series of recorded virtual sessions posted on Marietta College's YouTube channel that features staff, faculty, students, and administrators sharing information about the admissions process, financial aid, student life opportunities, etc.

- **College with an Admission Counselor** - A chance for prospective and admitted students to connect virtually with Marietta admissions counselors to ask any questions about the institution specifically and their college search process generally.

Despite their best efforts at attracting prospective students, enrollment yield at Marietta College has remained below 20 percent over the previous five admissions cycles. This trend is due to several regional and institutional challenges that have only been exacerbated by the

COVID-19 pandemic. Additional insights gathered from Marietta's Enrollment Management team suggest that Ohio contains a significant number of similarly-sized private colleges, which makes the competition for students increasingly challenging as many students opt to attend the institution closest to them. This choice often comes at the last minute as students are increasingly extending their decision timelines as well. As the cost of higher education continues to rise, community college is also siphoning some students away from Marietta as families search for more cost-effective post-secondary options. Concurrently, the two and four-year transfer pipeline to the institution has not yielded a significant number of students either. Anecdotally, Marietta's slate of academic program offerings also lacks some of the most high-demand majors that are common at larger public and private institutions both within and outside Ohio, e.g. health professions and some sub-disciplines of engineering. Staff also mentioned their frustration with the technical limitations of the Admissions website, in addition to its lack of centralized data on student outcomes, which prevents students and families from fully considering Marietta College as a viable option.

Research Questions & Hypotheses

The following questions guided our research and analysis:

1. To what extent does an increase in a student's financial aid package offer increase the probability of enrollment for out-of-state students to Marietta College?

    a. Which academic majors are most attractive to out-of-state applicants to Marietta College?

    b. For admitted students who enroll somewhere other than Marietta College, which academic majors are they choosing?

    c.   What is the range of students most likely to yield at Marietta College based on academic quality (SAT and/or ACT score and high school GPA) and financial aid package offered?

2. What is the relationship between student campus visitation and enrollment at Marietta College?

    a.   For currently enrolled first-year students who visited Marietta College prior to enrollment, which elements of the visit experience were most associated with students choosing to apply and ultimately enroll there?

3. Using a narrative analysis, what is the user experience (UX) of prospective college students navigating Marietta College's website?

We hypothesized the following outcomes based on prior analysis of overarching themes related to our research questions that are explicated further in our literature review:

1. An increase in a student's financial aid package increases their likelihood of enrollment at Marietta College, though this will vary across demographic characteristics such as race and geographic location, as well as entering academic credentials, specifically SAT or ACT score.

2. In general, a student's visit to Marietta College increases their likelihood of enrollment there, and each element of the visitor experience, e.g. before, during, and after, contributes to that decision.

3. In general, the aesthetic quality of Marietta College's website and a student's facility in navigating the website will increase the likelihood of applying to the institution.

Literature Review

In order to further situate the challenges and opportunities facing our capstone client, we begin by defining common characteristics of small, private, liberal arts colleges to provide a baseline of understanding about this institutional type. Secondly, this study reviewed extant literature on five primary themes related to our problem of practice and research questions: contemporary challenges facing small, private liberal arts colleges, financial aid strategies and emerging solutions utilized by these institutions, college visitation as a component of the college choice process (with particular emphasis on small, private, liberal arts colleges), and the online user experience of prospective college students as they interact with college admissions websites.

Common Characteristics of Small, Private, Liberal Arts Colleges

Beginning in 1970, the Carnegie Commission on Higher Education developed a classification system to represent and control for institutional differences among colleges and universities and this index has been updated numerous times since 1973, including in 1987, 1994, 2000, 2005, 2010, 2015, and 2018 (Center for Postsecondary Research, Indiana University School of Education, 2018). The classification of liberal arts colleges as a broad category within this system has also undergone a series of fundamental changes during this period. From 1970 to 1976, the Carnegie Commission identified 721 liberal arts colleges, 689 of which were private, as either Liberal Arts I or Liberal Arts II based on enrollment of primarily undergraduate students, conferral of over 50% of their degrees in liberal arts fields, and acknowledgment as either 'highly selective' or 'less specialized' based on admissions and academic criteria (Ferrall, 2011). Between 1987, the total number of liberal arts colleges fell to 572, and by 1994, the Liberal Arts I and II categories were eliminated in favor of the Baccalaureate (Liberal Arts) Colleges I and II designation based on highest degree conferred with category I schools awarding

40 percent or more of their baccalaureate degrees in liberal arts fields with more 'restrictive'

admissions criteria and category II schools awarding fewer than 40 percent of their baccalaureate

degrees in those fields with 'less restrictive' admissions criteria (Ferrall, 2011). By 2001,

additional modifications were made that, "maintained the distinction between 'arts and sciences

disciplines (leaving out 'liberal') and 'occupational and technical' disciplines (which it renamed

'professional' disciplines), and added to it the extent to which institutions offer graduate degrees

in the same fields in which they confer undergraduate degrees" (Ferrall, 2011, p. 11). According

to the most current descriptive criteria, Marietta College is categorized as a Baccalaureate

College: Diverse Fields with an undergraduate instructional program defined as Professions plus

arts and sciences, with some graduate coexistence.

Current estimates suggest that less than 250 liberal arts colleges exist in the manner

described above, the vast majority of which are private, not-for-profit institutions. Similarly, U.S.

News & World Report's National Liberal Arts College rankings list for 2021 only lists 223

schools, almost all of which are private. These institutions, which are also colloquially referred

to as independent colleges, serve the smallest proportion of current undergraduate students in the

United States at less than 2 percent, which equates to roughly 100,000 to 350,000 students

overall (Ferrall, 2011). A consistent set of institutional characteristics persists across the

landscape of these institutions, regardless of the inherent variation based on Carnegie

classification. David Breneman's (1994) seminal research on liberal arts colleges suggested the

following: "Educationally, liberal arts colleges award the bachelor of arts degree, are residential,

primarily enroll full-time students between 18 and 24 years of age, and limit the number of

majors to roughly twenty to twenty-four fields in the arts, humanities, languages, social sciences,

and physical sciences" (p. 12). Ferrall (2011) adds the following descriptive characteristics:

"Student enrollment is typically between 1,000 and 2,500…Most instruction is provided by full-time tenured or tenure-track professors, not graduate students or teaching assistants…Classes tend to be small…Course enrollments of fifty students are uncommon and those with twenty or fewer are the norm" (p. 13). In terms of geographic location, many of these schools are situated in rural locales, and, "The brick-and-mortar locations of these campuses are largely in the Midwest and Northeast (Marcy, 2020, pp. 3-4). A small proportion of these schools are public, state-supported institutions, though "most are privately controlled and privately supported" (Mayhew & Hamilton, 1962, p. 5). There is a prevailing perception that only children of privilege and wealth attend these institutions, though the reality is that "Private colleges admit about the same percentage of students as public universities do in so-called 'at-risk categories --- low-income, minority, and first-generation --- but the graduation rates of these students in the privates are far better than those of their counterparts at the public institutions" (Ekman, 2014, p. 24). Marietta College epitomizes many of the criteria described above as it a private college located in rural Southeastern Ohio that enrolls less than 1,500 students, enjoys a 10:1 student/faculty ratio, average class size of 13 students, and while not overwhelmingly diverse from the standpoint of race and ethnicity, enrolls one-third of its students from limited-income backgrounds.

Contemporary Challenges at Liberal Arts Colleges

Demographic Shifts in the College-Going Population

Demographic shifts within the domestic college-going population are affecting all types of higher education institutions, though these trends are acutely impacting liberal arts colleges in several ways. Many of these colleges have historically enjoyed appeal as regionally-based,

residential institutions that enrolled primarily affluent, traditional-aged, non-minority populations. However, higher education has been forced to grapple with student growth within populations that are traditionally underrepresented at the college level, including Black, Hispanic, and Asian/Pacific Islander students, as well as students of limited economic means and those who are the first in their families to attend college. These emerging student populations often present needs that few liberal arts colleges have ever confronted, and this new reality creates a unique strain on liberal arts colleges from both an enrollment management and student services perspective as, "...many small colleges were created for, and still primarily serve, middle and upper-middle-class White students" (Marcy, 220, p. 3). Furthermore, the geographic clustering of many liberal arts colleges in the Midwest and Northeast presents yet another growth challenge for these institutions as these areas are experiencing the most drastic population declines from a national perspective (Marcy, 2020). For example, the total number of public and private high school graduates in the state of Ohio is projected to decrease from 132,230 to 127,440 during the ten-year period of 2021-22 to 2031-32; over the same period, the population of students identifying as White will decrease as the populations of Hispanic, Black, and Asian/Pacific Islander students increases (Western Interstate Commission of Higher Education, 2020).

Growing Financial Strain

Analysis of the long-term financial health of liberal arts colleges suggests that "With the expectation of the few very wealthy colleges, all liberal arts colleges have struggled financially for a long time" (Ferrall, 2011, p. 37). In many ways, both the internal structure of these institutions and external market forces have combined to exacerbate this trend even further. Because of their limited size and the inability to rely on scale as a balancing measure, liberal arts

colleges are both labor-intensive due to their reliance on full-time and tenured teaching faculty and capital intensive in their pursuit of maintaining high-quality facilities and an ever-expanding base of academic programs (Stimpert, 2004). Except for the most highly selective and well-resourced colleges within this grouping, few have the excess financial reserves, either through private gifts or endowment funds, to cover the costs of their enterprise, which forces them to draw increasingly on tuition revenues to survive. However, there is increasingly less operating revenue from tuition as more aggressive tuition discounting is used to compete for a dwindling population of students, creating a vicious financial cycle that imperils the long-term viability of these schools. Furthermore, the continued fallout of the economic recessions of the last several decades, combined with stagnating wages and family incomes, has created additional downward financial pressure on these institutions as students and families demand more institutional financial aid for college.

Institutional Mission Drift

As the competition for students within this institutional sector continues to ramp up, many liberal arts colleges have resorted to strategic decisions that are gradually shifting them away from their core missions. At the turn of the 20th century, the liberal arts curriculum took hold within higher education, and based on a foundation of classical language and literature, was primarily focused on preparing students to appreciate the knowledge and think critically while preparing them for life as productive members of society (Lattuca & Stark, 2011). This curriculum still exists in modified formats at institutions across the spectrum, though the rising costs of higher education have meant that "Private colleges, in particular, face growing pressure from prospective students and their families to demonstrate superior outcomes in order to justify the premium prices they charge" (Stimpert, 2004, p. 44). Consequently, students increasingly

enter college focused less on how their learning will translate to productive citizenship and more on how their time in college will translate to a high-paying career. In response to this trend, many liberal arts colleges have created or begun to emphasize their career-related programs, particularly in high-demand areas like management, accounting, computer science, environmental studies, sports medicine, and a host of other pre-professional health careers (Hayes, 2015).

The same tendency towards mission drifts in the quest for students has also infiltrated the academic realm of liberal arts colleges as the competitive pressure to keep pace with more research-intensive institutions has pushed many faculty members towards a preoccupation with research productivity and away from their core mission as instructors first. In combination, these trends create institutional environments that resemble true liberal arts colleges less and less, pushing students and leaders alike into ambiguous territory where institutional identity is less and less clear. In response to these external market forces, Marietta College has introduced several of the academic majors mentioned previously to brand itself, both formally and informally, as a contemporary liberal arts college.

An Increasingly Competitive Landscape

Liberal arts colleges face an increasingly competitive landscape for survival, both within their immediate institutional sector, as well as across higher education broadly. Within the grouping of liberal arts colleges specifically, there is significant stratification based primarily upon student selectivity, endowment funding, and overall prestige ranking. At the top of this hierarchy are a group of well-known institutions, such as Williams, Amherst, Bowdoin, and others who enroll the most accomplished students, enjoy high public regard and prestige and

have accumulated the largest funding reserves thanks to their relative age and the generosity of

donors. Below them are several hundred, regionally-based colleges that enroll a higher

percentage of part-time and non-traditional students, operate on meager capital resources, and

have in various ways moved away from the traditional liberal arts curriculum to attract new

students (Neely, 1999). Lastly, the liberal arts colleges at the bottom of this grouping compete

for students without the resources to develop a more career-oriented curriculum but enjoy a

competitive advantage due to their niche as religious or single-sex institutions, e.g. women's

colleges (Neely, 1999).

Outside of their immediate sphere, these small colleges are buffeted by other types of

institutions looking to acquire an increasing market share of their target demographic. For

example, large, research-intensive public universities have increasingly invested in the creation

of undergraduate honors programs which, "... replicate many aspects of the small college

experience within the context of a large university, and tuition rates are usually far below the

costs of most private schools" (Stimpert, 2004, p. 44). While they have faced growing federal

scrutiny in recent years, for-profit colleges present a newer threat to the survival of liberal arts

colleges as a new wave of non-traditional students enters the higher education landscape looking

for more flexible, on-demand learning opportunities.

Financial Aid Strategies at Liberal Arts Colleges

The utilization of financial aid as a student enrollment tool for liberal arts colleges has

evolved over the last several decades as a result of changes in federal policy and ongoing shifts

in the demographic and fiscal landscape of the college-going population. Highlighted by the

1944 G.I. Bill and the Higher Education Acts of 1965 and 1972, federal higher education policy

in post-World War II America was primarily focused on broadening college access to a wider

swath of the country through the provision of government-sponsored financial aid programs, low

tuition rate increases at colleges nationwide, and generous use of institutional funds solely for

aiding less financially advantaged populations (Summers, 2004). However, the decades since the

1980s have produced a series of economic changes that have specifically imperiled liberal arts

institutions like Marietta College. First, "Increases in college tuition, combined with the decline

in real terms of federal student aid during the 1980s, raised the specter that more and more

families could not afford to pay for a college education" (Delucchi, 1997, p. 422). At the same

time, "While family incomes increased in real terms, in the 1980s and 90s (with the most

significant income gains skewed toward the top of the income distribution), families in all

income groups saw their real incomes fall between 2000 and 2010…" (Hill, Tiefenthaler, &

Welsh, 2013, p. 47). The demographic shifts outlined previously which suggest reduced numbers

of high school graduates, particularly in geographic areas where liberal arts colleges

predominate, points to the sobering reality that, "…liberal arts colleges have found themselves

drawing increasingly from their funds, generated for the most part from tuitions…" (Zemsky,

1995, p. 6).

The market pressures forcing liberal arts colleges to draw increasingly from their

financial reserves to enroll students speak to a fatal flaw in the business model of these

institutions that is quickly approaching a crisis point. When compared against similarly-situated

public colleges and universities, liberal arts colleges provide the most expensive undergraduate

education as half of the most expensive higher education institutions in America during the

2009-2010 academic year fit that description (Ferrall, 2011). Historically, these colleges have

relied on a, "…robust supply of middle and upper-middle-income families that are able and

willing to pay close to the full cost of their education" (Marcy, 2020, p. 4). Primarily enrolling

traditionally-aged students from this end of the socioeconomic spectrum allowed liberal arts

colleges to generate ample amounts of tuition revenue to subsidize the population of needier

students they selected in what amounted to a high-tuition, high-financial aid approach. However,

the ever-widening wealth gap, coupled with a gradual shift towards a more non-traditional, less

affluent college-going population, has meant fewer families both willing and able to pay the high

cost of tuition at private, liberal arts colleges, a scenario that is further compounded by the

increasing use of merit aid to attract students regardless of their ability to pay (Marcy, 2020). The

historic over-reliance on tuition revenue as a financial aid tool now makes liberal arts college

like Marietta especially vulnerable since, compared to more research-intensive colleges and

universities that generate significant revenue via federal grants and contracts, "Liberal arts

colleges, by contrast, get more than three-quarters of their revenues from tuition, net of the

revenues they rebate to students in the form of student-aid grants" (McPherson & Schapiro,

1999, p. 51).

   With enrollments steadily declining (and impacting net tuition revenue) and the

competition for high-achieving students continually increasing, the list of financial aid strategies

available to attract students to liberal arts colleges has shifted significantly over the years.

Similar to the financial aid subsidies offered to students in the form of merit aid, liberal arts

colleges now resort to gradually more aggressive tuition discounting such that, "colleges try to

charge the full price to students who can afford it, and who are not in danger of being enticed

away by other schools while offering discounts to those who cannot or will not pay the full fare"

(McPherson & Schapiro, 1999, p. 55). However, this approach has its limits as only the most

highly selective and endowment-rich colleges can afford ever-increasing student subsidies,

leaving less affluent, regionally-based colleges to compete for a dwindling pool of lower quality

student prospects (McPherson & Schapiro, 1999). Endowment earnings and gifts provide the

largest source of student financial subsidies at liberal arts colleges, both of which have been in

decline since the recent economic downturns of the 2000s, further exacerbating the competitive

imbalance within this sector (Hill, Tiefenthaler, & Welsh, 2013). Furthermore, McPherson &

Schapiro (1999) describe three other enrollment strategies utilized by the spectrum of liberal arts

colleges to meet enrollment goals:

1. The need-blind, full-need approach, used primarily by the "best-endowed and most selective

private colleges and universities in the nation" that can afford to "admit students without regard to

financial need and that they fund all such students to the extent of their need" (pp. 56-57).

2. The budget stretch approach, utilized by the largest number of schools, in which, "schools would

budget what they felt they could for student aid and try to stretch those funds to fill their freshman

class with the best students they could, taking as little account as possible of a student's ability to

pay" (p. 57).

3. The strategic maximization approach, also utilized by less prestigious institutions, whereby, "the

school sets out deliberately to shape a financial aid strategy that maximally advances the combined

and conflicting" goals of admitting the best students and gaining as much revenue from them as

possible" (p. 57).

A fourth and final strategy, referred to as a tuition reset, occurs when, "…the institution

decreases the sticker price and simultaneously reduces financial aid, in the hopes of increasing

both enrollment and net tuition revenue" (Marcy, 2020, p. 6). However, this strategy has

provided mixed success while also presenting a familiar challenge to this set of schools: "There

need to be enough students able and willing to pay full, or near-full, price" (Marcy, 2020, p. 6).

Potential Solutions to Contemporary Challenges Facing Liberal Arts Colleges

Liberal arts colleges have begun to experiment with a variety of new, innovative

strategies to grow student enrollments and ensure their long-term financial viability. Some of the

more prominent examples include significant reductions in tuition cost, curricular redesigns that

reconfigure the traditional liberal arts curriculum around themed multidisciplinary coursework,

new undergraduate and graduate courses and degree programs in high-demand areas, and job

placement guarantees upon graduation (Nietzel, 2019). In an attempt to broaden their appeal with

students, particularly from underrepresented backgrounds, many liberal arts colleges have,

"decided to de-emphasize or eliminate the use of standardized test scores in the admission

process", a move that theoretically allows schools to, "enhance the ethnic and economic diversity

of their respective campuses without compromising the academic quality or performance of their

student bodies" (Belasco, Rosinger, & Hearn, 2015, p. 209). As the share of traditionally-aged

college students also continues to trend downward, liberal arts colleges are exploring previously

untapped recruitment opportunities, including "more aggressive courting of non-traditional

students and the development of semester, year-long, and summer programs that would attract

students from other colleges and universities" (Stimpert, 2004, p. 49). Furthermore, institutions

are also shifting their attention to better retaining and supporting currently enrolled students

through to graduation, which has led to investments aimed at, "beefing up support services

including counselors, offering detailed plans to help them graduate and using data to flag and

ultimately prevent them from dropping out" (Nadworny, 2019). Due to the comparatively small

size of endowments at liberal arts colleges and the reliance on student aid subsidies, capital

campaigns that support the growth of unrestricted endowment dollars are also being considered

as colleges like Marietta address this new competitive landscape (Stimpert, 2004).

College Choice

College choice is defined as the decision-making process for students concerning whether

and where to attend college (Okerson, 2016). Students exhibit vast differences in their abilities,

needs, and interests, and these factors influence the alignment between a student and the type of

institution they ultimately choose, which is commonly referred to as institutional fit (Cochran &

Coles, 2012). The influence of institutional fit is an important theme in college choice models,

and we focus specifically on Hossler and Gallagher's three-phase model of college choice within

our conceptual research framework (Mattern, Woo, Hossler, & Wyatt, 2010).

Hossler and Gallaghar's three-phase model of college choice consists of three phases:

predisposition, search, choice. The predisposition stage is the decision-making process in which

students determine whether to attend college (Mattern, Woo, Hossler, & Wyatt, 2010). Once a

decision is made to attend college, a student will transition to the search stage. The search stage

focuses on a student's information gathering process to determine which type of institution they

would like to attend and where they will submit applications (Mattern, Woo, Hossler, & Wyatt,

2010). Within the choice phase, students make a final decision on where to attend college after

considering the offers of admission they receive (Mattern, Woo, Hossler, & Wyatt, 2010).

The search stage, which we highlight within this literature review, includes gathering

information as a means to determine the best institutional fit and match. This stage "entails

looking for possible candidate colleges while simultaneously learning more about the relevant

characteristics of college (e.g. size, social atmosphere, special academic programs, campus

facilities)" Hamrick, 1996, p. 182). It is during this knowledge-seeking stage that colleges and universities can have the greatest impact on applicants (Mattern, Woo, Hossler, & Wyatt, 2010).

Institutional fit and match are important as students are more likely to complete college if they attend an institution that fits their social, academic, and financial needs (Cochran, & Coles, 2012; Okerson, 2016). As a result, where students choose to enroll can be just as important as whether they choose to enroll in college at all. Unfortunately, many students come from social backgrounds where college knowledge is limited, specifically first-generation college students or students from low-income families (Cabrera, 2014). Research has demonstrated that underrepresented populations have fewer information resources to help them understand and decide among college options and the level of access and use of these resources varies by family income, race/ethnicity, and parent education level (Cabrera, 2014). In sum, the choices students make regarding college depends greatly on the availability, transparency, and quality of the information they receive (Okerson, 2016).

Considering the importance of fit and match to student success, along with the national focus on increasing degree attainment, it is critical that prospective college students and their families receive the information, guidance, and support they need to choose a best fit institution where they are more likely to graduate. Providing opportunities for in-person campus visits is especially important to determine if a particular institution is well suited to a student's needs. Campus visits allow students to preview the campus environment and determine if they fit socially and academically with the students attending the colleges in their choice set (Okerson, 2016). As the cost of higher education continues to rise, students and families struggle when considering which institution of higher education provides the best education, campus life, campus amenities, and location (Okerson, 2016). Visiting a college campus and experiencing the

campus community and culture first-hand is the primary vehicle for making such a decision. In fact, a recent research study of 1,100 high school seniors concluded that the campus visit was the most influential factor assisting students in deciding whether or not to apply to a particular school (Cohen, 2009).

Campus Visitation

One of the biggest challenges faced by domestic colleges and universities is recruiting new students to increase overall enrollment (Secore, 2018). As a result, many institutions are reviewing their recruitment strategies and admissions practices in an attempt to grow application volume and increase the percentage of admitted students who ultimately matriculate, also known as student yield. Yield rates are one measure of a college's popularity and desirability among prospective students, and this metric is also considered in the assessment of a college's selectivity and prestige ranking (Birch & Rosenman, 2019). One strategy to increase student yield rates is enhancing on-campus visits. Research suggests that students who visit a college campus are twice as likely to matriculate compared to a student who does not visit before applying (Brown, 2010). Consequently, colleges and universities are investing significant time and resources to revamp the on-campus visit experience for prospective students.

Campus visits are vital recruiting tools for higher education institutions as research continues to highlight the importance of on-campus visits during a student's college choice process (Birch & Resenman, 2019). For the purpose of this study, the campus visit is defined as "any visit, whether formal or informal, to a college campus, which may include an information session, formal campus tour, class observation, overnight visit, or a visit specifically for admitted students (Okerson, 2016)". Traditionally, students sign up for a formal information session and tour through the institution's admissions office. Information sessions are typically led by an

admissions officer, often in collaboration with a current student, and tend to cover facts and

about the institution, including the history of the college, admission criteria, faculty-student ratio,

cost, and financial aid options (Okerson, 2016). Campus visits also include general information

about academics, campus life, and an overview of the application review process. Information

sessions are often paired with a tour of campus, led by a current student, which allow prospective

students and families to familiarize themselves with the campus by visiting the university's

student center, dining facilities, academic buildings, residence halls, and other important

locations on campus. The tour also provides insights about the institution such as campus

traditions and student life (Okerson, 2016).

Non-traditional tours or visits are also common and may include designated days for

special populations, such as for athletes, honor students, underrepresented populations, and

students interested in specific academic majors or programs (Okerson, 2016). Special tours or

visit days may also consist of an overnight stay hosted by a current student, visiting a class,

shadowing a student, STEM tours, on-campus interviews, scholarship programs, multicultural

programs, international programs, admitted student days, attending summer programs/camps, or

even informal visits with family and friends. These types of programs are highly effective in

supporting students and families in their college choice process (Okerson, 2016).

In a recent study, Okerson (2016) examined survey data across multiple universities to

determine which parts of the campus visit are most important in attracting students; results of the

study found that personal interactions, a general feel for campus and community culture, and the

aesthetic quality of the campus are the most influential factors. Further research suggests that for

students and their families, "the campus visit provides a highly personalized and "real" way to

make a satisfactory college decision based on psycho-social factors and serves a decisive test for

how students perceive they will fit in once enrolled" (Secore, 2018, p. 151). More specifically, the campus tour is an incredibly crucial part of a student's visit to campus as, "students are able to both evaluate and react to campus aesthetics and the community within" (Secore, 2018, p. 153). Of particular importance during the campus visit are, "the hospitable nature of the community and the friendliness of the people students encountered…seeing facilities of interest…talking to professors, and attending classes" (Hesel, 2004, p. 1).

A student's first impression of a college or university begins well before the campus visit takes place (Secore, 2018). For instance, personal interactions before, during, and after the campus visit have a profound impact on prospective students. Interactions before the visit create an initial idea of the campus, interactions during the visit stir ideas and perceptions of the campus community, and interactions after the visit affect the lasting impression of the visit as a whole (Secore, 2018). Each of these elements plays a role in building student interest for the institution under consideration, ultimately informing the decision to enroll or not.

Despite the well-documented importance of campus visits within the college choice process, a lack of available research exists to highlight which elements of the campus are the most influential in the student's final decision and whether these factors are under a university's control (Brown, 2010; Okerson, 2016). Given the current competitive marketplace in college admissions, it is crucial for colleges and universities to understand the factors influencing student choice.

College Admissions Websites & User Experience (UX)

Effectively communicating to prospective students why a particular institution is a good fit for them is a major challenge for higher education professionals (Johnston, 2010). The

college-going population operates in a "digital age" where information is easily disseminated and

obtained instantly; simply mailing brochures and hosting college fairs is no longer sufficient to

attract and yield students. Students expect the use of high-tech multimedia tools such as

interactive websites and virtual simulations, online forums, and social media platforms to

communicate and receive information (Tucciarone, 2009). Utilizing this set of tools is all the

more crucial as students explore a variety of college options and navigate the college choice

process in a digital age.

Students access information about college from a variety of sources including parents,

teachers and school counselors, peers, college representatives, and the internet (Cabrera and La

Nasa, 2000). The college search can often begin on the internet as students search for college

websites to gather information. A student's perception of a college begins with the institution's

website and this initial assessment happens within the first few seconds of interaction, which

makes the user experience of navigating each website extremely important (Tucciarone, 2009).

Website user experience is extremely important in the current college admissions climate as the

COVID-19 pandemic has cancelled the majority of in-person engagement with prospective

students, forcing colleges and universities to rely solely on virtual platforms to showcase their

institution's value proposition. Students and families are relying even more on institutional

websites to provide admissions information, access virtual tools and resources, and capture a

glimpse of student life through pictures and videos.

In broad terms, user experience (UX) refers to how a person feels when interfacing with a

system that involves some human-computer interaction, including elements such as ease of use,

perception of the value of the system, utility, efficiency in performing tasks, and so forth (Gube,

2010). When applied to college and university websites, user experience can involve several

factors, including a student's ability to initially access the website, how easily information can be accessed within the website, and how well information and visual elements are structured for the viewer. Each of these elements plays a key role in the college choice process for students as they consider multiple types of institutions simultaneously.

Choosing a college is a complex and often confusing process, requiring that students and parents be knowledgeable of differences in institution types, admission requirements, financial aid, and indicators of institutional quality (Cabrera, 2014)). Unlike middle and upper-income students, low-income students, and first-generation college students often embark upon the path to college with limited information and resources and rely heavily on institutional websites for information (Cabrera, 2014). For those students who are able to access reliable internet, they may have a hard time understanding the information provided on college websites, especially information about tuition and financial aid. Studies have also found that college websites are sometimes biased, incomplete, and can be hard to navigate (Tucciarone, 2009).

College websites support students and families in the college choice process and can either encourage or discourage a student's college choice. Unfortunately, the National Research Center for College and University Admissions found "a majority of college and university websites to be lacking in regard to features found to be important to prospective students in their school search process" (Tucciarone, 2009). Consequently, colleges have placed increasing emphasis on restructuring their websites to make them more attractive and relevant to prospective student concerns. Nevertheless, many websites still reflect colleges' "egocentric nature, which assumes that prospective students understand a college's organization and structure" (Mentz and Whiteside, 2003). In a 1999 survey of 1,000 college-bound seniors, 88%

of respondents said they would drop a school or be disappointed with a school if that institution's website did not have the content they needed (Tucciarone, 2009).

Research about user experiences designs within higher education has primarily been applied to the integration of technology to teaching and research, including learning management systems, digital applications, and library research (Gube, 2010). There are limited examples within the existing research literature on how the user experience of a college admissions website informs or detracts from a student's decision to enroll in a particular college. One example is a 2007 study by Cooper and Burns that was conducted as part of a redesign effort for a specific college's website to identify which elements high school students found engaging or inhibiting and how that impacted their motivation to submit a college application. This study found that college websites that feature virtual tours ranked high. A study participant stated that "I believe the most meaningful data on a college's website is the virtual tour option. For students who are not able to tour the school, this tool is a lifesaver and a time saver. It lets you know exactly what the campus is all about without having to actually be there (Cooper & Burns, 2007)." For the colleges considered to have poorly designed websites, one participant stated that "I almost immediately put them to the bottom of the pile. It was something I now realize was subconscious. I viewed their website as a reflection of the university (Cooper & Burns, 2007)." These findings highlight the close, mutually reinforcing relationship between a college's website and student choice about whether to apply.

Students considering a college expect to easily access and navigate college websites, and in order to do so, their homepages must be well-organized and easily link to desired information such as tuition rates, admissions criteria, and student life opportunities (Tucciarone, 2009). The most sought-after information tends to be academic majors and tuition rates, followed by overall

prestige ranking, size, and location. Pictures, videos, and virtual tours of campus also are

considered as key website elements. In addition, a research study found that participants

described their need for information relating to the student population such as diversity and

cultures, athletics, student life such as student organizations, financial aid, scholarships, housing,

student demographics, and information about the surrounding city (Tucciarone, 2009). Aside

from assessing information commonly found on a college's website, prospective students are also

looking for ways to speak with current students about the institution's advantages and

disadvantages, discuss course curriculum with professors, and develop a relationship with

admissions and financial aid representatives (Tucciarone, 2009).

As institutions of higher education continue to face challenges related to student

enrollment, an evaluation of their website and the user experience (UX) of prospective students

in navigating it will be extremely important. As students and families continue to navigate the

complex college choice process, an institution's website should not serve as a barrier. Therefore,

this study aims to add to the existing knowledge base on website user experience in the context

of college admissions and which elements influence or inhibit the college search process for

students.

Research Design & Methodology

A mixed-methods research approach that combined quantitative and qualitative elements

was utilized to address the research questions of interest related to Marietta College's strategic

goal of increasing undergraduate student enrollment. Our methodology, dependent on the

research question, included the review of institutional administrative data, student and staff

interviews, website observations, and user performance tasks. Before implementing our research

study, the researchers participated in a focus group with Marietta College's Enrollment

Management Team in order to learn more about their current student recruitment and enrollment

strategies. This process was extremely important in order to understand Marietta College's

current strengths and challenges; attendees included the Vice President of Enrollment

Management, Assistant Vice President of Enrollment Management, Director of Admissions,

Associate Director of Admissions, and four admission counselors. This focus group furthered our

understanding of Marietta College's Enrollment Management division, as well as influenced the

methodology used within this research study. Below is a description of each methodology,

categorized by each research question.

Research Question 1

To answer the first research questions, we conducted a quantitative study examining

institutional administrative data to determine the ideal applicant range based on a combination of

academic quality and the financial aid package amount needed to yield more out-of-state, first-

year students at Marietta College.

Quantitative Methods

The university's Department of Institutional Research (IR) provided the data needed to

answer research question one. Our review of administrative data included all information on the

15,368 applicants, admits, and enrollees from 2015- 2020. This included detailed financial aid

records outlining each student's aid award, expected family contribution (EFC), and amount of

unmet financial aid. The data also included standardized test scores, high school grade point

averages, as well as geographic and demographic characteristics of all applicants. Additional

data from the National Student Clearinghouse was examined to determine where students opting

not to enroll at Marietta College ultimately attended and what they chose to study. Financial aid

information for the sub-population of admitted students who enrolled at a college or university

other than Marietta College was only available for 40 students and this limited sample size of

observations prevented us from analyzing the influence of financial aid on enrollment of out-of-

state students. The following populations were also excluded from our analysis: transfer students,

students enrolled mid-year, and students enrolled before 2015. After restricting our data set only

to students for whom we have all financial aid information, the sample size of 15,368 was

evaluated. Table 1 is a breakdown of Marietta College applicants from 2015-2020. Further

information about the sample's geographical and demographic characteristics is located in the

Appendix section.

Table 1:

2015-2020 Marietta College Applicants, Admits & Enrollees. (N=15,368)

	Applicants	Admits	Enrollees
Fall 2015	2,844	2,041	271
Fall 2016	2,684	1,649	238
Fall 2017	1,638	1,096	262
Fall 2018	2,846	1,962	343
Fall 2019	2,919	2,065	345
Fall 2020	2,437	1,802	338
TOTAL	15,368	10,615	1,797

Data Analysis

Purposive and non-probability sampling techniques were employed, along with a

regression analysis, to understand the relationship between student enrollment, a student's

financial aid award, academic quality, and residency location. This analysis also identified the

academic offerings most attractive to out-of-state students, as well as "best-fit" out-of-state

students, to maximize student yield rates. Once all data was collected, the data were analyzed

using regression analysis to understand the relationship between student yield and institutional

aid, major of interest, and state residency.

Research Question 2

Our second research questions focused on the relationship between campus visitation

and the likelihood of applying to and enrolling at Marietta College. To answer the second

research question, we executed a two-pronged, mixed-methods strategy: qualitative interviews

with current first-year students to better understand which elements of the campus visit were

most associated with leading a student to apply and ultimately enroll, and analysis of institutional

administrative data to determine the strength of the relationship between campus visitation and a

student's likelihood of enrollment at Marietta College.

Participants & Data Descriptions

We examined institutional administrative data provided by the Department of

Institutional Research (IR) which included on-campus visit registration information (e.g. campus

tours, open house events, and special visit days) from 2015-2020, as well as demographic and

educational characteristics for those students. The second step in this study was to interview

current first-year students in order to learn about their college choice process, what factors were

important to them when choosing a college, and their experience visiting Marietta College. The

sample used to answer this question set were ten current first-year students who participated in

an official on-campus visit to Marietta College prior to enrolling. This included students who

participated in an on-campus tour, admission open house, or special visit day.

Table 2 outlines demographic data of Marietta College's first-year undergraduate student population, as well as the sample used in this study. There were proportionally more female participants in this study than the population, but the sample's geographic and demographic make-up reflected closely the overall first-year population of Marietta College.

Table 2:

RQ 2 Sub-question: Characteristics and Student Population Sample

	Population (approx. 1,129)	Sample (N=10)
Male	51.6%	30%
Female	48.4%	70%
First Time Enrolled (FTE) Fall 2020	29%	90%
White	85.8%	70%
BIPOC	14.2%	30%
Athlete (First -Year)	19%	20%
In-State (Ohio)	72.9%	80%

Design: Mixed Method

The mixed-method design for this study involved four components. This included the review of institutional data, student interviews, and observations. The first component consisted of reviewing institutional data. This included student applicant data, campus visitation data, and geographical, educational, and demographic characteristics of all admitted and enrolled students. The second component included student interviews. For the execution of student interviews, we used purposeful, convenient, and non-probability sampling techniques to recruit participants for a virtual focus group or individual interview in which their perspective on the Marietta College on-campus visit experience as prospective students was gathered. Student participants were

recruited by a university-wide email sent out to all first-year students who previously participated in a campus visit experience. Follow-up emails were sent out by student involvement advisors and referrals from other participants. Study participants were at least 18 years old and currently enrolled as a first-time, full-time undergraduate student at Marietta College. Study participants were provided a written consent form upon initial contact and reminded of their consent rights prior to the beginning of each focus group or individual interview. A copy of the consent form, as well as a draft interview protocol, is included in the appendix below.

The final component was a virtual observation. Due to COVID restrictions, the researchers were unable to observe student tours and presentations in person, but Marietta College provided virtual presentations and tours to prospective students and families. These opportunities included the following; Admission 101 Webinar, Coffee with an Admission Counselor, a Virtual Tour, and a Prospective Student Webinar. The researchers observed a prospective student webinar, which consisted of a presentation featuring information on admissions, financial aid, student life, and academic course offerings. The researchers also observed a virtual tour, which included a 360-degree video and virtual reality of campus. The researchers were able to click through a web-based virtual tour of interactive photos and videos designed to substitute for those unable to visit in person. By engaging in observations, we were able to familiarize ourselves with current recruitment and matriculation strategies, as well as get a glimpse of prospective students' and families' experiences while visiting Marietta College.

Data Analysis

During this study, we first conducted a regression analysis to understand the relationship between student matriculation and on-campus visit, major of interest, and state residency. Next, we analyzed current student interviews, separately, identifying themes and patterns. This process involved listening to recordings of the interviews conducted by a member of the team. Once all interviews were reviewed multiple times, the team developed an interview matrix guided by the theoretical framework and emerging themes that came forward from the interviews. The enrollment staff interviews were not incorporated into our analysis of research questions one or two but were conducted to better understand current recruitment and enrollment strategies and to provide useful context for our final recommendations.

Research Question 3

The third research question focused on the user experience (UX) of prospective college students as they navigate the Marietta College's website, specifically focusing on their "future student" resources.

Sample

Convenience and volunteer sampling, using a non-probability sampling method, was used to recruit four prospective college students (at least 18 years old, not currently enrolled in college). Due to the institution's interest in out-of-state students, all four prospective students were not from the state of Ohio, half of the students were male, and half of the students were from minority backgrounds. The participants were not new to using computers, the internet, or navigating college admission websites and each of them were beginning their own individual

college search process. None of the students were familiar with Marietta College or their website prior to participating in this study.

Design & Data Analysis

The research design in this study involved four stages. The first stage was an internal review of Marietta College's website for future students by the researchers. The second stage involved each student completing a series of video-recorded performance tasks on the Marietta College admissions website, followed by an interview recording their overall experience using the website. Those tasks included: finding the admissions application and requirements, navigating how to pay their enrollment deposit, locating financial aid and other scholarship opportunities, locating a specific course of study, and locating first-year involvement opportunities. Each student completed the performance task individually and with only limited direction from the researchers.

The data collected from the interviews were analyzed separately, identifying themes and patterns. This process involved first listening to recordings of the interviews conducted by a member of the team. Once all interviews were reviewed multiple times, the team developed an interview matrix guided by the interviewer questions and emerging themes that came forward from the interviews. Next, the data collected during each participant simulation was translated and summarized into a narrative analysis using pictures to showcase the users' experiences. This will allow stakeholders to visually see the experiences of their users as they navigate Marietta College's official website. A copy of the recruitment messaging that was used to identify study participants, as well as the consent form and simulation protocol, are attached in the appendix below. The final stage included interviews with the Vice President for Communication and

Brand Management and the Director of Web Strategy to provide additional context about

institutional branding and website strategy.

Findings

Research Question One Summary

Although we were unable to definitely establish the relationship between increases in

financial aid package offers and the probability of enrollment to Marietta College for out-of-state

students due to a lack of available observations in the data provided to draw statistically

significant conclusions, we acknowledge the importance of financial aid within the college

choice process. Through our recommendations, the researchers encourage Marietta College to

further track financial aid offers to non-yielded students in order to better understand the

financial aid ranges needed to yield a higher amount of students.

Although financial aid is a very important factor within the college choice process,

college match also influences student yield, as well as the retention and graduation of students.

College match looks beyond the academic profile of students and their likelihood of acceptance

and extends to factors such as a student's academic, financial, personal, and social needs. This

led to our sub-questions as we explored which majors are most associated with out of state

applicants. Through this exploration, the researchers found that the top ten academic majors

selected most often by out-of-state applicants to Marietta College were: Exploratory, Petroleum

Engineering, Health Science, Psychology, Land & Energy Management, Biology, Sport

Management, and Special Education/Elementary Education, Biochemistry, and Marketing.

One also explored the academic majors and course offerings that admitted students who

enroll somewhere other than Marietta College choose. Although the academic majors selected

by students admitted to Marietta College who enrolled at a different college or university were

not available in the data provided to us, we were able to draw the following conclusions about

why students selected certain majors at those schools: Similar programs ranked higher at

competitor institutions, in addition to availability of in-demand academic programs not offered at

Marietta College.

Finally, the researchers were able to define the range of students most likely to yield at

Marietta College based on academic quality such as the SAT and/or ACT score and high school

GPA). The populations who have historically yielded at the highest rates at Marietta College are

the following: Students identifying as white, male, and non-Pell Grant eligible from the state of

Ohio; students identifying as white women who are non-Pell Grant eligible from the state of

Ohio. Based on a combination of academic quality and high school GPA, the range of students

most likely to yield at Marietta College fall between a score of 19 and 23 on the ACT and a high

school GPA between 3.044 and 3.52. While Marietta College offers generous institutional

financial aid to students relative to the cost of attendance and has a low unmet need average,

there is a noticeable degree of mismatch between the students that are offered larger aid

packages and the students most likely to yield.

Research Question Two Summary

As acknowledged in previous literature, where students choose to enroll can be just as

important as whether they choose to enroll in college at all (Cabrera, 2014). Therefore, it is

important for students and families to visit colleges and institutions of interest to see if the school

is a right fit for their needs. Campus visitations is also a great recruitment tool for universities as

they develop creative strategies to recruit and yield students. This prompted the researchers'

further explorations into the relationship between student campus visitation and enrollment at

Marietta College. Overall, the researchers found that Marietta College applicants are about 24%

more likely to enroll if they participate in a campus visit. This relationship is statistically

significant at a p value < .001. This was further examined as we sought to understand which

elements of the visit experience were most associated with students choosing to apply and

ultimately enroll at Marietta College. One found that students initially learned about Marietta

College through an alumni or peer connection, web research, or direct contact from the

institution based on test scores on college entrance exams or the athletics recruitment process.

The college choice factors most important to them were cost and availability of financial aid,

their assessment of the campus during an in-person visit, and the institutional type and size. The

elements of the Marietta College visit experience that resonated most and led to their applying

and ultimately enrolling was the perception of intimate, personalized interactions, the aesthetic

appeal of campus and its comfortable, "home-like" environment, consistent follow-up after each

visit, and the invitation to return to campus for multiple visits.

Research Question Three Summary

The college search often begins on the internet as students search through college

websites to gather information (Tucciarone, 2009). Therefore, the effectiveness of an

institution's website is extremely important for students and families as they navigate the college

search and choice process. Acknowledging this importance, the researchers wanted to further

understand the user experience (UX) of prospective college students as they navigate Marietta

College's website. One found that while prospective students found the images of Marietta's

College campus on the website visually appealing, the overall user experience was hindered by

the following elements: inconsistency in website navigation, information that was not well

segmented, irrelevant search bar results, and a lack of students "in action". One participant

stated that "If I was just scrolling through a list of colleges and it was difficult to find

information, I would have moved on." This is extremely problematic as an institution's website

is the source of a lot of important information and plays a major role in college search and

selection.

      The findings for each research question are outlined in greater detail below:

Research Question 1

      Our analysis of institutional administrative data focused on the previous five admissions

cycles at Marietta College (2015-2020), including all students who applied, were admitted or

denied, and who enrolled as first-year students. Additionally, National Student Clearinghouse

data was analyzed to determine the first enrollment destination of students who applied and were

admitted to Marietta College but chose to enroll elsewhere. Students who transferred into the

institution, either during the spring or summer term, were included in our administrative data set

but were excluded from our analysis.

To what extent does increasing financial aid increase the probability of enrollment for out-of-

state students at Marietta College?

      Unfortunately, the researchers were unable to answer this portion of research question

one due to the limited data sample available. Only 40 student observations were included that

outlined financial aid awards for students who were accepted but did not matriculate to Marietta

College. This limited data set lacked an adequate number of observations to significantly

demonstrate the influence of financial aid on enrollment of out-of-state students at Marietta

College.

Which academic course offerings are most attractive to non-resident applicants to Marietta

College?

Consideration of academic major offerings is a critical part of the college choice process
as students want to know whether the schools they are interested in have the kinds of academic
programs they are interested in and that will afford them the chance to earn a living wage after
graduation. In light of this fact, our research reviewed the top ten academic majors selected by
both in-state and out-of-state applicants to Marietta College

The following majors were identified below and outlined in Table 3. Top majors for both
in-state and out-of-state students are indicated by an asterisk (*). Tables 3 and 4 also showcase
enrollment numbers by major per academic term. A description of each major was provided by
Marietta College's major departmental website. (https://www.marietta.edu/academic-
departments)

- ***Exploratory:** Students who enter Marietta College as Exploratory are undergraduate
  students who have not declared their major of interest. As an Exploratory student, one
  explores the various majors and minors available at Marietta College by taking courses
  that will help them explore different disciplines. Students are also encouraged to take
  COLL 200, a one-credit course designed to assist students in exploring different career
  options and majors.

- ***Petroleum Engineering:** The goals of Marietta College Petroleum Engineering
  program is to provide students with a fundamental knowledge of Petroleum Engineering,
  specifically in the areas of drilling, production, reservoir engineering, and formation
  evaluation.

- ***Health Science**: The interdisciplinary Health Science program pulls from a multitude of academic fields to create a curriculum that fully prepares students to think critically about the modern challenges facing human health and healthcare. The program first establishes a basis of foundational scientific concepts from the fields of Biology, Chemistry, and Sports Medicine. Courses include Human Physiology, Human Anatomy, Environmental Toxicology, and Health Communication.

- ***Psychology:** Psychology focuses on the scientific study of individual and collective behavior, the physical and environmental bases of behavior, and the analysis and treatment of behavior problems and disorders. This major also includes instruction in the principles of the various subfields of psychology, research methods, and psychological assessment and testing methods.

- ***Biology:** Biology is the study of life. At Marietta College, the biology major culminates with a capstone experience, where students design, execute and present either a hands-on research project or a critical review of the scientific literature, comparable to a graduate-level thesis.

- **Sports Management:** The Sport Management program at Marietta College provides students the knowledge and skills to pursue a career in one of the many areas of the sports industry, including event management, ticketing and sales, YMCA and other voluntary organizations, the private fitness sector, collegiate sports, sports marketing, and youth sports. Through a rigorous selection of courses that encourage and develop critical thinking and problem solving, students develop into a leader who can apply business practices to the sports industry.

- ***Special Education/ Elementary Education:** This double major provides the

  coursework and experiences necessary for two teaching licenses: the Ohio Early

  Childhood License (Preschool through grade 3) and the Ohio Mild to Moderate

  Intervention Specialist License (Kindergarten through grade 12). The program contains

  additional coursework and experiences for the grades 4 and 5 endorsements. Throughout

  the program, students complete courses in how to work with students with diverse needs,

  and a 12-hour core of classes designed to prepare participants to teach reading in

  preschool through grade five and pass the required Ohio test of reading for teachers.

Table 3:

Top 10 Enrolled Majors for Out of State Students (2015-2020 Combined)

Enrolled Major 1	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	% of Enrolled Students
Exploratory	24	18	20	37	28	38	25% (164)
Petroleum Engineering	38	28	29	16	12	7	20.6% (130)
Health Science	2	2	6	9	2	2	3.6% (23)
Psychology	1	2	2	6	6	3	3.1% (20)
Land & Energy Mngt	7	4	4	1	0	2	2.8% (18)
Biology	2	3	1	6	3	3	2.8% (18)
Sports Management	3	4	3	6	0	0	2.5% (16)

							%
Special Educ/ Elementary Dual	0	0	3	8	3	1	2.3% (15)
Biochemistry	4	3	2	1	3	2	2.3% (15)
Marketing	1	1	1	5	3	1	1.9% (12)

Table 4:

Top 10 Enrolled Majors for In-State Students (2015-2020 Combined)

Enrolled Major	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	% of Enrolled Students (Ohio) N= 1166
Exploratory	31	22	34	36	54	94	23.2% (271)
Petroleum Engineering	34	24	19	25	20	14	11.6% (136)
Biology	4	7	7	14	16	15	5.4% (63)
Psychology	7	5	6	9	12	14	4.5% (53)
Special Educ/ Elementary Dual			12	10	12	15	4.2% (49)
Biochemistry	9	4	11	5	8	8	3.8% (45)
Athletic Training	11	15	17				3.6% (43)
Health Science	4	4	4	9	15	6	3.6% (42)
Accounting	5	2	2	9	6	6	2.5% (30)

For admitted students who enroll somewhere other than Marietta College, which academic course of study are they choosing?

Our analysis of institutional administrative data included information from the National Student Clearinghouse to determine the first enrollment destination of students admitted to Marietta College who decided to enroll at another college or university. Of the 10,714 students admitted to Marietta College between 2015 and 2020, information was available for 6,144 students who chose to enroll at a different college or university. The table below provides an overview of the most popular institutional destinations other than Marietta College, segmented by the following groups: all admitted students, students who list Ohio as their home state, and out-of-state students, including those identifying as International. The proportion of students that selected each institution is also included within the chart.

Table 5:

Top 10 Enrollment Destinations for Admitted Students Other than Marietta College from 2015-2020.

	Overall (N=6,144)	Ohio (N=4,150)	Out-of-State (includes International) (N=1,994)
1	Ohio University (OH) - 497 students (8.1%)	Ohio University (OH) - 483 students (11.6%)	West Virginia University (WV) - 150 students (7.5%)
2	Ohio State University (OH) - 261 students (4.2%)	Ohio State University (OH) - 252 students (6.1%)	Pennsylvania State University (PA) - 73 students (3.7%)
3	West Virginia University (WV) - 190 students (3.1%)	Kent State University (OH) - 162 students (3.9%)	Marshall University (WV) - 73 students (3.7%)
4	Kent State University (OH) - 165 students (2.7%)	Muskingum University (OH) - 149 students (3.6%)	Washington & Jefferson College (PA) - 33 students (1.7%)
5	Muskingum University (OH) - 157 students (2.6%)	University of Cincinnati (OH) - 135 students (3.3%)	West Virginia Wesleyan College (WV) - 32 students (1.6%)
6	University of Cincinnati (OH) - 139 students (2.3%)	University of Akron (OH) - 132 students (3.2%)	Fairmont State University (WV) - 29 students (1.5%)

7	University of Akron (OH) - 135 students (2.2%)	University of Mount Union (OH) - 109 students (2.6%)	West Virginia University at Parkersburg (WV) - 28 students (1.4%)
8	University of Mount Union (OH) - 119 students (1.9%)	Otterbein University (OH) - 109 students (2.6%)	John Carroll University (OH) - 24 students (1.2%)
9	Otterbein University (OH) - 114 students (1.9%)	Ohio Northern University (OH) - 95 students (2.3%)	University of Pittsburgh (PA) - 23 students (1.2%)
10	Marshall University (WV) - 112 students (1.8%)	Capital University (OH) - 95 students (2.3%)	West Liberty University (WV) - 22 students (1.1%)

Of the twenty distinct institutions listed above, eleven of them, or roughly 55%, are located within the state of Ohio, regardless of the student's home location. The other nine schools included in the list are located in either West Virginia or Pennsylvania. The proximity of these schools both to and within Ohio confirms several qualitative and quantitative findings outlined elsewhere, namely that students considering Marietta College want to attend an institution that is relatively close to home, as well as the ongoing competition for students amongst liberal arts colleges within the state.

The information we analyzed from the National Student Clearinghouse did not include the enrolled major for the population of admitted Marietta College students who opted for another college or university, which hindered our ability to address this question definitively. However, the first-choice major that each admitted student listed on their Marietta College application was available, and comparing that list against the most popular majors at the schools listed above allowed us to make some reasonable predictions about the academic disciplines that led those individuals to a destination other than Marietta College. Compiling publicly available information from both institutional websites and U.S. News & World Report on the most popular

majors at each school led to the list below, which combines disciplines listed more than once that

are also grouped by common area of study:

Table 6: Most Popular Academic Majors at First Enrollment Destination other than Marietta College						
Engineering	Business	Health Professions	Natural Sciences	Social Sciences	Liberal Arts & Humanities	Other
Chemical Engineering	Accounting	Chiropractics	Agriculture	Criminal Justice	English	Ceramics
Computer Science, Computer and Information Sciences and Technology	Business Administration and Management	Dental Hygiene	Animal Sciences	Economics	General Studies	Emergency Management
Mechanical Engineering	Finance	Pharmacy	Biology, Biological, and Biomedical Sciences	Education	Interdisciplinary, Arts & Sciences	Homeland Security, Law Enforcement, Firefighting, and Related Protective Services
	Marketing/ Marketing Management	Pre-Health	Mathematics	International Studies	Visual and Performing Arts	Pre-Law
		Public Health	Natural Resources and Design	Communication, Journalism, and Broadcasting		
		Nursing	Physical Sciences	Political Science		
		Sports Medicine		Psychology		
				Speech Communication and Rhetoric		
				Music Therapy		

When compared against the list of existing undergraduate academic majors and minors offered at Marietta College, two major themes emerged relative to what majors drew admitted students to other schools:

Similar Programs Ranked Higher at Competitor Institutions

Comparing the list of undergraduate majors and minors at Marietta College against the list of most popular majors offered at the list of competitor institutions above revealed some degree of overlap in academic offerings. For example, Marietta offers many of the same majors across several different focus areas, including Business, Natural Sciences, Socials Sciences, and within the Liberal Arts & Humanities. While institutional rankings often provide an incomplete and imperfect picture of the academic experience at a particular college, analysis of publicly available information suggests that several of the commonly offered programs at competitor institutions possess a level of national recognition that exceeds what is offered at Marietta College. For example, one of Marietta College's most popular and highly recognizable majors is Petroleum Engineering, though its analog at Pennsylvania State University was ranked third nationally in 2020 by U.S. News & World Report among its list of Best Undergraduate Engineering Programs (Pennsylvania State University, 2020). Similarly, Music Therapy is a population program offered at Marietta College and Ohio University, though the latter program is ranked third among schools in the state of Ohio (Ohio University, 2021). We suspect that this distinction in program rankings contributed in some way to the decision of admitted students to enroll somewhere other than Marietta College.

High-Demand Programs Not Offered at Marietta College

Despite the overlap in academic program offerings between Marietta College and many of the competitor institutions listed above, we suspect that Marietta's lack of some of the more high-demand academic majors and sub-disciplines offered at these other institutions contributed to the decision of admitted students to enroll elsewhere. A prominent example of this difference can be found in the majors listed as Health Professions in the above chart. Several of these majors, including Nursing, Public Health, Pharmacy, and Sports Medicine are growing in popularity among prospective populations, and institutions that have these programs are increasingly sought after for that reason. For students interested in these areas, Marietta College is less of a viable option due to its lack of programs in these areas. Similarly, Marietta College offers an Engineering dual degree program, though they do not appear to offer many of the lucrative, in-demand Engineering sub-disciplines that are common at other institutions, such as Chemical, Mechanical, and Biomedical Engineering. While Marietta considers itself a contemporary liberal arts college and offers majors in several areas outside of the traditional liberal arts core, the lack of some in-demand academic programs presents a competitive disadvantage within their work to attract incoming students.

What is the range of students most likely to yield at Marietta College based on the combination of academic quality (SAT and/or ACT score, HS GPA) and aid package offered?

Marietta College's Department of Institutional Research provided data on 15,368 new freshman applicants, admits, and enrolled students from 2015-2020. Our analysis is for admitted and enrolled domestic (resident and non-resident) students. The data also include detailed financial aid, demographic, and educational characteristics of admitted and enrolled students. Table 7 provides an overview of applicants, admits, and yielded students, as well as admit and yield rates. Transfer students were eliminated from the data set. In general, Marietta College

accepts about 70% of its applicants and yields about 17% of its admitted students. Although the

student yield rate has increased somewhat from fall 2015 to fall 2020, yield rates have not

consistently increased from year to year.

Table 7:					
Overall applied, admit and yield rate of students at Marietta College from 2015-2020.					
	Applicants	Admits	Enrollees	Admit Rate	Yield Rate
Fall 2015	2,915	2,112	271	71.8%	13.3%
Fall 2016	2,703	1,668	238	61.4%	14.4%
Fall 2017	1,644	1,102	262	66.9%	23.9%
Fall 2018	2,850	1,966	343	68.9%	17.5%
Fall 2019	2,915	2,061	345	70.7%	16.7%
Fall 2020	2,440	1,805	338	73.9%	18.8%
TOTAL	15,467	10,714	1,797	69.1%	16.9%

Table 8 further describes Marietta College's applicants, admits, and enrolled students by

student characteristics, such as gender, ethnicity, state of residency and financial aid Pell grant

eligibility from 2015-2020. Overall, the largest population and enrollees to Marietta College

were students identifying as white, male, non-Pell Grant eligible, and from the state of Ohio. The

second-largest population of applicants and enrollees are white women from the state of Ohio

who are also not eligible for the federal Pell Grant. Students from minority backgrounds apply

and enroll at a lower rate than their non-white counterparts at Marietta College. Out-of-state

students are 40.5% of the applicants to Marietta College, but have an admit rate of 37%,

compared to in-state students who have an admit rate of 74%. Out-of-state student yield to

Marietta College averaged 37%, compared to 17% for in-state applicants.

Table 8:						
Mean and standard deviation for applied, admitted and enrolled students from 2015-2020						
	Number of Applicants	*% of Applicants*	*Number of Admits*	*Admit Rates*	*Number of Enrolled*	*Yield Rates*
Variables						

Gender					
Male	8,740	56.9%	5,892	67.4%	1,056	17.9%
Female	6,622	43.1%	4,721	71.3%	741	15.7%
Race/ Ethnicity					
White	10,299	67.0%	8,011	77.8%	1,412	17.6%
Black/ African American	2,209	14.4%	997	45.1%	103	10.3%
Hispanic	689	4.5%	383	55.6%	58	15.1%
Asian	373	2.4%	220	59.0%	36	16.4%
Hawaiian/ Pacific Islander	23	0.1%	11	47.8%	2	18.2%
American/ Alaska Native	59	.4%	28	47.5%	4	14.3%
Two or More Races	825	5.4%	535	64.8%	74	13.8%
Race/ Ethnicity Unknown	891	5.8%	430	48.3%	108	25.1%
Standardized Test Score Ranges					
ACT < 19	2,526	9.8%	1,437	13.5%	249	13.8%
ACT > 19 < 23	3,519	22.8%	3,226	30.3%	540	30%
ACT >23 < 26	2,638	17%	2,533	23.8%	442	25%
ACT > 26 < 34	3,223	20.9%	3,084	29%	460	25.5%
ACT >= 34	222	1.4%	212	1.9%	21	1.1%
HS GPA Ranges					

HS GPA < 3.044	2,526	16.4%	1,437	13.5%	249	13.8%
HS GPA > 3.044 < 3.52	2,692	17.5%	2,497	23.5%	436	24.2%
HS GPA > 3.52 < 3.904	1,759	11.4%	1,688	16%	285	16%
HS GPA >3.904 <3.99	2521	16.4%	2,404	22.6%	353	19.6%
HS GPA >= 4	3561	23%	434	4.1%	106	5.8%
State of Residency						
In-State	9,187	59.7%	6,848	74.5%	1,166	17.0%
Out-of- State	6,232	40.5%	3,914	63%	670	17.0%
Other						
Pell Grant	1,885	12.3%	1,530	81.2%	408	26.7%
Non-Pell Eligible	5,632	36.6%	5,022	89.2%	1,257	25.0%
First Gen	1,885	12.3%	1,530	81.2%	408	26.7%

Table 9 provides an overview of enrolled students' average financial aid award and average unmet financial need at Marietta College. This data was further analyzed based on student demographic, academic, and financial aid characteristics from 2015-2020. The values come from one of two sources: information contained in a student's application for admission or their Free Application for Federal Student Aid (FAFSA) form and its resulting financial aid offer. Due to limited financial aid information from all applicants, this data is based on enrolled students who completed the FAFSA; this left a sample size of 1,662 observations. During the five-year period under review, the average cost of attendance for Marietta College was

$49,918.57, the average financial aid award offered to enrolled students was $36,257.29, and the

average unmet need of students who enrolled at Marietta College was $2,873.604. This was

further explored by looking at the average financial aid award and unmet need of students based

on student demographic characteristics, educational characteristics, and socioeconomic status as

determined by federal Pell Grant eligibility.

Overall, female students received the highest average financial aid award and had the

lowest unmet need compared to male students. Also, students who had a 4.0 high school grade

point average or higher had the highest financial aid award and lowest unmet need. Due to the

staggering differences in enrollment numbers between white and non-white students, one cannot

compare financial aid awards between minority and non-minority students, but average aid

awards, as well as unmet financial need, are outlined below. The data also revealed that non-Pell

eligible students are receiving an average financial aid award of $34,613.61, but have an unmet

need of -$761.81. This results in students receiving financial aid that is beyond their financial

need, as determined by their expected family contribution (EFC) within the FAFSA.

Table 9:

Financial Aid Award: Mean and standard deviation for enrolled students that applied and/or qualified for financial aid from 2015-2020.

	Enrolled					
	Financial Aid Award			*Unmet Need*		
Variable	*N*	*M*	*SD*	*N*	*M*	*SD*
Gender						
Male	949	$35,262.04	$11,963.82	941	$3,161.17	$9,088.77
Female	713	$37,581.97	$10,525.7	704	$2,489.21	$9,191.12

Race/ Ethnicity						
White	1366	$36,224.27	$11,254.67	1355	$2,338.36	$9,232.04
Black/ African American	99	$37,891.17	$12,129.1	98	$8,548.00	$5,309.435
Hispanic	53	$ 32,840.56	$11,048.12	52	$3,803.36	$9,722.77
Asian	12	$36,230.36	$10,232.03	11	$441.81	$10,893.91
Two or More Races	74	$37,606.29	$12,205.44	72	$5,881.04	$5,830.18
Race/ Ethnicity Unknown	52	$ 36,841.03	$13,007.53	51	$1,162.21	$10,615.39
Standardized Test Score Ranges						
ACT Score < 19	244	$37,534.19	$11,853.11	244	$7,085.52	$6,813.78
ACT Score > 19 < 23	427	$35,807.1	$12,111.24	420	$3,357.92	$8,260.38
ACT Score >23 < 26	276	$35,432.34	$11,021.74	274	$1,365.38	$10,139.51
ACT Score > 26 < 34	336	$35,736.83	$10,524.42	329	$364.77	$9,858.33
ACT Score >= 34	21	$35,943.86	$10,741.75	19	$2,046.78	$9,304.34
HS GPA Ranges						
HS GPA < 3.044	315	$34,972.16	$13,128.57	312	$5,965.615	$8,222.46
HS GPA > 3.044 < 3.52	445	$36,814.71	$11,996.52	442	$4,041.527	$8,000.81
HS GPA > 3.52 < 3.904	474	$36,589.34	$10,930.96	470	$1,938.36	$9,503.034
HS GPA >= 4	305	$36,630.61	$10,016.62	301	$443.0166	$9,534.05
EFC Ranges						
EFC <=0	376	$29,320.53	11,460.09	367	-9,894.376	8,845.008
EFC > 1710	463	$39,487.25	10,365.9	461	7,958.184	3,630.082
EFC > 1710 < 10327	423	$36,915.32	10,923.47	420	3,815.898	3,467.337

EFC > 10327 < 25045	0	0	0	0	0	0
EFC > 225045 < 222553	18	$24,063.39	8,069.846	14	-19,178.57	3,571.291
EFC >= 222553	0	0	0	0	0	0
Pell Grant Eligibility						
Received Pell Grant	637	$38,902.16	10,405.57	638	$8,611.64	$4,047.56
Non-Pell Grant	1025	$34,613.61	$11,720.89	1,007	$-761.81	$9,587.29
State of Residency						
In-State	1,121	$37,239.88	10,941.71	1,108	$3,213.77	$8,816.096
Out-of- State	541	$34,221.29	$12,122.26	537	$271.734	$9,733.943
Note: The average cost of attendance for Marietta College from 2015-2020 was $49,918.57.						

Table 10 is the results of a linear regression analysis. The data specifically examined student academic characteristics as a predictor of student enrollment. In general, for every one-unit increase in their high school grade point average, students are 2.7 percentage points more likely to enroll. Although ACT scores are an important indicator in college admissions, when grade point average was considered within student enrollment, ACT scores were not a statistically significant factor.

Table 10:

Regression Analysis Summary for students' academic characteristics as a predictor of student enrollment

Constant	.025428 (1.36)
GPA	.0274072** (4.23)

ACT Scores	.0012786 (1.72)
Note:R-squared= 0.6845 No. Observ.= 11,435 **indicates significance at p < .001 level T-value in parenthesis	

Research Question 2

The results for research question two are categorized into two sections, administrative data and first-year student interviews.

Administrative Student Data Findings

What is the relationship between student campus visitation and enrollment at Marietta College?

Our review of administrative data related to campus visitation and its impact on whether students ultimately applied and enrolled at Marietta College revealed the following set of results, outlined below. While our analysis originally intended to focus on applicant pool data from 2015 through 2020, the data set analyzed only consisted of visit data from fall 2016 through 2020. Overall campus visitation has had a 58% decline from 2016-2020. As of 2020, 19% of applicants visit campus. For those that visit the campus, about 38% matriculate to Marietta College, and about 52% of all enrolled students visit campus before enrolling. Although Marietta College has faced major challenges due to a national pandemic, their visitation numbers are consistent from 2019. This has been a steady decrease from 41% of applicants in 2016 who visited campus and 84% of all enrolled students visited campus prior to enrollment.

Table 11:					
Campus Visitation From Fall 2016-Fall 2020					
	Number of Applicants	% of Applicants	% of Students Who Visit That	Number of Enrolled	% of Enrolled Students Who

		Who Visited Campus	Enrolled	Students	Visited Campus
Fall 2016	2,684	41% (1118)	18% (202/1118)	238	84% (202)
Fall 2017	1,638	43% (710)	30.1% (214/710)	262	82% (213)
Fall 2018	2,846	30.2% (867)	27.9% (242/867)	343	70.5% (242)
Fall 2019	2,919	16.5% (481)	37.7% (182/482)	345	47% (164)
Fall 2020	2,437	19.2% (469)	37.5% (176/469)	338	52% (176)

Table 12 demonstrates campus visitation by ethnicity from 2016 to 2020. As stated, campus visitation has faced a steady decline since 2016. Unfortunately, this is reflected in minority campus visitation. In general, minority students participate in on-campus visits at Marietta College at a lower rate compared to their white student counterparts, but this rate has substantially decreased since 2016.

Table 12:

Campus Visitation: Students By Ethnicity (2016-2020)

	White	Black or African American	Hispanic	Asian	Two or More Races	Race/ Ethnicity Unknown	American Indian	Hawaiian/ Pacific Islander	Total Visits
Fall 2016	852	116	25	5	50	67	9	2	1126
Fall 2017	565	62	21	4	34	24	3	1	714
Fall 2018	722	39	21	6	43	34	2	0	867
Fall 2019	398	22	31	6	21	17	2	0	481
Fall	415	12	10	5	30	1	0	0	473

2020									

Table 13 represents a regression analysis summary for campus visitation as a predictor for Marietta College's undergraduate enrollment. Overall, applicants are about 24% more likely to enroll at Marietta College if they participate in a campus visit. In general, campus visitation was statistically significant in undergraduate enrollment, as indicated by a p-value <.001.

Table 13:

Regression Analysis Summary for campus visitation predicting Marietta undergraduate enrollment (2016-2020)

Constant	.0313107** (6.10)
Campus Visit	.2381095** (31.79)
Note:R-squared= 0.1151 T-value in parenthesis No. Observ= 7,776 **indicates significance at p < .001 level	

Student Interview Findings

The themes and patterns that emerged from the first-year student interviews are located in Table 14.

Table 14:

Thematic Findings from Qualitative Interviews about Marietta College visit experience

	Theme 1	**Theme 2**	**Theme 3**
Information Gathering	Connections: Word of mouth & Alumni	Web Research	Directly Contacted: Test scores and/or Athletics

Campus Visit Experience	Intimate, personalized (perceived) interactions	Aesthetic appeal of campus	Comfortable, "home-like" environment
Post- Visit Follow-Up "I felt like they wanted me"	Consistent, ongoing institutional follow-up	Invited Back to Campus: Multiple visits were common	
College Choice Factors	Financial Aid	Campus Visit	Institutional Type & Size

Information Gathering

University Connections

When asked how students first heard about Marietta College, the majority of participants mentioned some type of university connection. This was typically through a parent, friend, or high school staff member who graduated from Marietta College. Word of mouth was very prevalent in how students gained an understanding of what Marietta College has to offer as it relates to academics, athletics, and social engagement.

Directly Contacted

Most of the students who had not heard of Marietta College through word of mouth were directly contacted by Marietta College through non-affiliated college listservs or through their athletic affiliation. Many described receiving emails, pamphlets, and postcards in the mail. This made many students feel like "Marietta College wanted them."

Web Research

Students did describe using the internet as a supplemental source of information, but often to follow up on what they learned about the institution from another source. One student did mention googling schools that had her major of interest and Marietta College was included on the list. From this list, she further looked into the institution. Although web search was not their initial way of learning about Marietta College, the information that was found online was an important component within their information-gathering stage.

Campus Visit Experience

(Perceived) Intimate & Personalized

Participants talked highly about Marietta College's tours being small and intimate. They perceived the campus tour as being personalized because of their personal interaction with the tour guide, admissions staff, and faculty. The formal elements of the campus presentation and tour were not as influential on the student's campus experience. Instead, the informal elements of the campus tour such as running into faculty and having small conversations, the beauty of the campus, and getting to know the student tour guide heavily influenced the visit experience.

Aesthetic Appeal of Campus

The size of the college and the aesthetics of campus are important factors for students when deciding to apply and enroll at an institution. This was emphasized throughout this study. Participants described Marietta College's campus as beautiful and felt like it "looked like a college." This was important to students because they wanted this "college-like feeling" of nice buildings, beautiful outdoor appeal, and students walking around campus. It was clear that study

participants had a preconceived idea of what a college should look and feel like and Marietta College was within that ideal college-like model.

Comfortable, "Home-Like" Environment

Another theme that was mentioned throughout multiple interviews was the feeling of a comfortable or home-like environment. While visiting campus, participants described the overall community as welcoming and felt as the campus was a right fit for them. In general, students described wanting a campus environment that exuded happiness and that they could see themselves thriving.

Post-Visit Follow- Up

"I felt like they wanted me."

After the visit experience, students stated that Marietta College provided consistent ongoing communication to them via email or mailers. A theme of feeling like Marietta College wanted them stood out within the study. One student described the college search process as feeling one-sided because they felt it was the student pursuing the institution, but mentioned that with Marietta College, they "felt like they (Marietta College) wanted them." This encouraged students to apply and explore Marietta College as a viable option.

Invited Back to Campus: Multiple visits were common

This concept of Marietta College actively pursuing students and providing consistent, and ongoing follow-up also influenced the theme of students attending more than one on-campus opportunity. This typically included a traditional campus tour and presentation and participation

in a special visit opportunity. Special visit days included an open house and/or student-specific days such as scholarship invitation days, departmental specific days, or sporting events.

College Choice Factors

When students were asked about the ultimate reasons they decided to attend Marietta College, many students talked about their on-campus experience, financial aid, and their interest in attending a small, private, liberal arts college. Although the on-campus experience was very important, financial aid stood out as a big influence. Many students talked about the importance of being able to afford the institution by qualifying for scholarships or other forms of financial aid. In general, the aesthetics of campus, the personal interactions, and the college-like feeling on campus that influenced enrollment are all elements that can be affected by chance and have little control by the institution. Although true, the researcher does suggest the following recommendations that may influence the connections described by participants.

Research Question 3

The results for research question three are broken into two categories, researcher observations, and post-tasks interviews. The themes and patterns that emerged from the researcher's observations can be seen in Table 15. The themes and patterns developed from student follow-up interviews can be seen in Table 16. The narrative analysis can also be found in the Appendix section.

Interview Observations

During each user performance task, the researcher observed each prospective student as they navigated through Marietta College's website. This process was repeated several times in

order to review accurate encounters and impressions. The observations, as well as the

participants' responses, demonstrated how online users behave when navigating the internet.

Participants look for information by scanning what is in front of them, then quickly browse over

the web page and search for what they are looking for. Overall, the researcher observed which

task was the most challenging to complete, which task was the least time to complete, and how

many steps did it take to complete each task. Although time was a factor, the researchers

acknowledge that as participants "got the hang of" the website and how it was structured, some

tasks became quicker to accomplish as they progressed through the website. The themes from

each observation are outlined below.

User Experience (UX) Participant Tasks
Task 1: Please navigate to the page with information on undergraduate admission requirements. This includes application deadline(s) and other required forms.
Task 2: Please navigate to the page where information on submitting an undergraduate admissions enrollment deposit is located.
Task 3: Please answer the following questions? What is the cost of attendance at Marietta College for an undergraduate degree? Please navigate to the page where Marietta College scholarships are located?
Task 4: Please identify an academic major of interest. Once selected, please locate the program or department webpage. Once found, please navigate to the page where the list of required courses is located to complete this academic course of study.
Task 5: Please navigate to the web page that describes campus involvement opportunities such as student clubs/organizations.

User Experience Overall Findings: Research Observations & Participant Feedback

Inconsistency in Approach to Website Navigation

Each student approached the five tasks differently. Although students are unique in their approach to navigating websites, depending on their experience with college websites, the participants did not develop a common approach or strategy when completing the five tasks. There were also inconsistencies in similarly named links. For example, many participants went to the "apply" tab, but because there were two separate "apply" tabs, one tab took participants to the admissions application and the other tab gave them a list of different types of applications, as well as step by step instructions for what they need to do to apply. Other inconsistent examples include departmental websites. In general, departmental pages were not standard. This caused challenges for students in accomplishing task four, in which departmental pages did not provide the same level of basic information such as required courses or sample schedule.

Information Overload: Long List

Overall, the participants found that Marietta College's website was helpful, in which it provided the information needed to apply to the institution, but the categories and list underneath were very extensive and overwhelming. This made the search process longer than anticipated. One prospective student stated that "If I was just scrolling through a list of colleges and it was difficult to find information, I would have moved on."

Irrelevant Search Bar Results

One strategy used to avoid the extensive list within the homepage was to use the website's internal search bar. Unfortunately, the search bar did not provide the most relevant information. For example, if a student typed in "tuition" the search results did not share the most current tuition information, instead, it provided articles on Marietta's College tuition decisions

for the upcoming year. Due to the website challenges, one participant googled the answers, rather than continuing to search for answers on the homepage or using the internal search engine. In general, the search bar did not provide the most relevant information needed to complete the performance tasks.

Lacked Students "In Action."

Although prospective students found Marietta College's website visually appealing, participants wished they had more pictures of students interacting on campus. Due to COVID-19 and social distancing guidelines, students are looking to websites to demonstrate how student life could potentially look like. One student stated that "If they included students doing activities, I think it would be a little more personable," others stating that "I don't know what to do on campus." Below is a table showcasing additional students' comments as it relates to their website experience and overall feedback.

Visually Appealing

Though some tasks were not as easy to navigate, prospective students talked highly about the website's visuals and how beautiful Marietta College is. One student stated that ""I really care a lot about how colleges look and this one looks really pretty."

In general, the challenges presented did not discourage students from applying to Marietta College, as three out of the four students stated that they would be interested in applying to Marietta College after learning more about it through their website navigation.

Table 15:

Thematic Findings from User Experience (UX) Task Interviews

Theme	Quotes
Visually Appealing	"I really care a lot about how colleges look and this one looks really pretty." "I really like the videos and pictures." "It looks like a cool place to go to." "(website) Definitely geared towards students."
"Information Overload": Long Categories	"It's a lot. If you knew what you were looking for, you could find it pretty well, but as a senior, I wouldn't know what this is." "Simplify links...very long list." "Other websites are a little bit more structured." "If I was just scrolling through a list of colleges and it was difficult to find information, I would have moved on." "It just feels like there's a lot going on...For me, it's a little bit too much sometimes." "Once you get the hang of it, it's easier." "It was kinda confusing."
Lacked Student "In Action"	"I don't know what to do on campus." "If they included students doing activities, I think it would be a little more personable." "Pictures should show students in action."

Limitations

Gaps in the data provided to us by Marietta's Department of Institutional Research hindered our ability to answer some of the research questions outlined originally. For example, the lack of financial aid award information for students admitted to Marietta College who enrolled at another institution, as well as enrolled major information for that same group,

prevented us from definitively answering two of the sub-questions of interest related to our first research question about the relationship between financial aid and enrollment. It is unclear why these data gaps existed, though we surmise yearly variation in recordkeeping practices provides some explanation.

Secondly, there was a level of inherent bias present in our research from the standpoint of participant response since we were unable to interview students who were initially denied admission to Marietta College or who were admitted and enrolled at another institution. While exclusively gathering responses from students who ultimately chose to enroll at Marietta College was simpler from a research design standpoint, this limited scope of responses, coupled with a relatively small population of participants, may have prevented us from surfacing a wider set of qualitative responses to some of our research questions. Both researchers also exhibited bias due to having professional experience in the realm of college admissions and financial aid, which likely influenced our overall perception of findings, analysis, and recommendations in some way.

The emergence of the COVID-19 pandemic in spring 2020 had an unquestionably significant impact on the ability of colleges and universities to conduct student recruitment efforts under optimal, in-person conditions. In spite of this fact, we were challenged throughout the research process to decipher the precise impact of the pandemic against the other contextual factors at play for Marietta College. For example, the drop in on-campus visitor volume had begun prior to the pandemic and continued through this past year, meaning that whatever underlying issues existed were only accelerated by the direct and indirect effects of COVID-19. It may be several more years before both researchers and practitioners are able to fully grasp the effects of this past year on the college admissions landscape, including at Marietta College.

Lastly, the research design and methodologies employed for this research project were highly context-specific to Marietta College, which limits the broad generalizability of our findings and recommendations beyond the capstone site. For example, our use of non-random sampling techniques in selecting study participants, coupled with the often dynamic, subjective, and context-dependent nature of user experience (UX) analyses prevents us from offering any universal guidance to other similar colleges based on our overall findings. However, the evaluation strategies used within our data analysis process could be replicated to address similar enrollment-related challenges at other small, private, liberal arts colleges.

Recommendations

This study supports the following recommendations designed to enhance student recruitment efforts at Marietta College towards the dual goals of increasing both first-year and total student enrollment.

Ideal Student Population

- **Geographic Markets with Growth Potential for Marietta College:** In addition to their ongoing work to engage students within the state of Ohio, our quantitative analysis of institutional applicant data and nationwide trends in the population of high school graduates revealed a list of geographic markets that Marietta College could consider more intentionally within their student recruitment efforts:

State	Number of Applicants	Avg. Applicant ACT Score and HS GPA	Admit Rate	Yield Rate	Projected Change in # of HS Graduates by 2025-2026
Florida	259	21.9; 3.30	54.1%	21.4%	+15.6%

Michigan	224	22.8; 3.36	58.5%	9.2%	-3.3%
Maryland	171	23.4; 3.40	68.4%	25.6%	+9.7%
Kentucky	136	23.9; 3.51	66.9%	14.3%	+2.9%
California	125	23.9; 3.36	60.8%	15.8%	-1.0%
Illinois	109	22.7; 3.32	51.4%	14.3%	-2.3%
Georgia	101	20.6; 3.22	28.7%	17.2%	+6.3%
Tennessee	87	21.9; 3.51	57.5%	8.0%	+5.1%
South Carolina	40	20.4; 3.28	60.0%	8.3%	+11.1%
Missouri	31	21.4; 3.01	38.7%	8.3%	+4.3%
Alabama	29	22.7; 3.45	44.8%	15.4%	+4.9%

The preceding list of states was compiled based on several factors, first being that each state falls within the ideal student yield range for Marietta College based on ACT score and high school grade point average (ACT range: greater than 19, less than 23; High school grade point average range: greater than 3.044, less than 3.52). Secondly, Marietta received at least 25 applications from each of these states between 2015 and 2020, admitting at least 50% of those applicants in all but three states (Georgia, Missouri, and Alabama). Lastly, the total combined number of both public and private high school graduates in all but three of these states (Michigan, California, and Illinois) is expected to increase by the 2025-2026 academic year, which coincides with the strategic deadlines identified by Marietta College leadership for accomplishing the dual enrollment goals outlined previously (Western Interstate Commission for Higher Education, 2020). These factors in combination suggest that Marietta College has potential to yield a higher

percentage of students applying from these states with an increased level of focus on outreach, programming, and engagement.

- **Increase Student Diversity:** Our earlier review of literature related to demographic trends impacting small, private, liberal arts colleges suggests that the predominately white people of traditionally-aged college students that historically populated these institutions is declining while the college-going population comes increasingly from underrepresented and non-traditional backgrounds. Small colleges like Marietta are particularly well-positioned to serve these student populations due to their focus on small class sizes and integrated systems of support resources. However, some of our quantitative findings suggest that many of these students, particularly those from underrepresented racial/ethnic minority groups are disadvantaged within Marietta College's admissions process in terms of engagement and financial support. While this was not an initial area of focus, we strongly encourage senior leadership at Marietta to re-focus their attention towards engaging and supporting these students more intentionally within the recruitment process as doing so both helps to achieve institutional numerical benchmarks, as well as enrich the overall academic and social climate.

- **Student Transfer Pipeline Program:** As the college-going population trends towards an increase in underrepresented and non-traditional student populations, one in particular that Marietta College has not historically yielded well is transfer students from two-year community colleges. In general, community college is a critical entry point for a broad spectrum of students who are interested in pursuing postsecondary education, and the majority of students who enter community college intend to transfer to a 4-year school. Marietta College has an opportunity to build a key student enrollment pipeline from

among this population as there are two open access, two-year community colleges within 50 miles of campus in the form of Washington Community College and West Virginia Northern Community College. Marietta should consider the creation or realignment of their current articulation agreements with these institutions, alongside focused academic advising and programming, to engage this population more readily. Creation of such a student pipeline could serve as a key way to increase access and opportunity for low-income, first-generation, and minority students in conjunction with the previous recommendation.

Recruitment Strategy

- **Consider more and larger name buys from third-party organizations to grow the student prospect pool:** Increasing Marietta College's annual application volume is one of the most important parts of the strategic approach to growing their undergraduate population. In order to do so, it is critical that a steady pool of high-quality domestic and international student prospects is generated. While the institution already receives prospective student names from testing agencies, Marietta should consider a set of targeted name buys from third-party higher education organizations to grow this pool of students. As the prospect pool grows, so too does the likelihood that, with early, ongoing outreach and engagement, these students will ultimately choose to apply to Marietta. Organizations like College Greenlight, Phi Theta Kappa, and the College Board provide this service, and list purchases can be made based on demographics, academic interest areas, geographic region, etc.

- **Consider the creation of one or more recruitment travel groups with similarly sized peer institutions:** A common refrain during our qualitative interviews with currently enrolled first-year students at Marietta College was that, even while many of them reside within Ohio, their knowledge of the institution was either extremely limited or non-existent. While potentially counterintuitive in light of the regional competition faced by Marietta, forming one or more recruitment travel groups with a select group of private peer and public non-peer colleges within the state could help Marietta maximize their exposure to prospective audiences. These groups would consist of admissions counselor representation from each school, conducting in-person and virtual recruitment events around the state and across the country. Furthermore, a series of groups could be created with a special purpose, such as targeting a particular student demographic or students based on academic interest.

- **Consider test-optional admissions policy:** The COVID-19 pandemic and its impact on admissions testing availability only helped to boost a growing groundswell of support for removing the artificial barrier of testing for prospective college students. As we know, some students, either due to test anxiety, lack of college knowledge, or the financial resources to afford more rigorous test preparation training, opt out of applying to college altogether or apply to institutions that are not a good match for them academically. Anecdotally, institutions that have introduced test-optional policies have seen noticeable increases in their overall application volume, and many of those students come from populations that are historically underrepresented within higher education, e.g. URM, limited income, first-generation, etc. For these reasons, Marietta College should also

consider a permanent policy of this kind as it presents a low-cost, high leverage opportunity to continue growing the pool of prospective applicants.

- **High School Partner Program:** In conjunction with the Office of Admissions and Office of Financial Aid, Marietta College should partner with select high schools in Ohio or the surrounding states to provide supplemental engagement, college application assistance, and financial aid support to high school students. This additional partnership and support will encourage students to apply to and enroll at Marietta College. Student benefits may include priority admissions, exclusive scholarship opportunities, and on-campus student programming.

- **Enhance high school counselor outreach and engagement**: High school counselors play a pivotal role in the college search and selection process for high school students as they often provide useful insight in helping students craft an appropriate list of schools based on academic potential and interest area. With this in mind, ensuring that high school counselors are informed of the most current updates about the academic and co-curricular opportunities at Marietta College should be a top priority for the institution as that knowledge helps counselors position the school appropriately in the minds of prospective students. In addition to targeted marketing and communications efforts, Marietta College should consider one or more on-campus visit events for counselors where they can be exposed to all that Marietta has to offer for students from their schools and regions, e.g. campus and town tours, panel discussions, and information sessions, guidance on helping students prepare their applications, etc. Elements of these events could also be offered in virtual format to maximize the institution's reach outside of normal recruitment regions.

● **Leverage alumni more strategically within the recruitment process:** Within our qualitative interview process, we learned that a connection to Marietta College alumni/ae was a common route for students to first learn about the college and consider applying there. It stands to reason that Marietta College alumni live in geographic regions across the country that the institution is interested in maximizing from a student recruitment standpoint, so leveraging those alumni in support of that goal should be considered. A potential option that could be realized involves partnering with Marietta College's Office of Development & Alumni Relations to catalog alumni in recruitment markets around the country to co-host virtual and in-person events in those areas. Additionally, an interview program where alumni connect with students in their area who are applying to Marietta for brief informational interviews could also provide another high-leverage touchpoint.

Campus Tours & University Programming

● **Enhancements to Yield Programming for Admitted Students:** To address the challenge of low student yield at Marietta College, a series of enhancements to pre-existing programming for admitted students should be considered. Crafting more targeted yield programming based on the demographic profile or academic interest area could create more personalized experiences that enable students to envision themselves integrating into the social and academic environment of the campus. Marietta currently has a Fly-In program for prospective students and this model could be replicated for admitted students to provide another opportunity to consider the college up close before making an informed enrollment decision. Additionally, enhancing and promoting the travel budget allowance for on-campus visits, particularly for underserved and limited

income populations, could encourage admitted students who might not otherwise be able to come to campus to make the decision to do so. As we learned during our qualitative interviews, once students are able to visit the campus, the likelihood that they decide to enroll does increase. Lastly, curating a deeper set of experiences that take place during yield events in the spring could also prove helpful, including more opportunities for student-faculty interaction, a student involvement fair, a cultural organization showcase, walk-in hours with financial aid staff, etc.

- **Reassess calendar of on-campus programs:** As part of the ongoing assessment of admissions recruitment strategy, a reconsideration of the schedule of admissions programming could prove helpful in maximizing visitor volume to the campus. This assessment should include the number and type of daily information sessions and tours, which times of year provide the most flexibility for students and parents to visit the campus, and creating closer alignment with national college admissions deadlines. For example, one anecdote from our qualitative conversation with the Enrollment Management team revealed that students were interested in more weekday tour options, so finding ways to incorporate a more regular set of weekday tours and information sessions could help boost visitor volumes.

- **Keep Tours Small & Include Faculty:** Although Marietta College is looking to expand enrollment, research participants highlighted their appreciation with a small, intimate tour experience. This component allows students and families to ask questions catered to their interests and interact with faculty, staff, and students on a more personal level. Moving forward, Marietta should consider ways to more intentionally create opportunities for faculty-student engagement during the on-campus visit experience. Students who were

able to interact with faculty during a tour, presentation, or panel discussion mentioned

how this heavily influenced their connection with Marietta College. At some institutions,

faculty and staff members are invited to participate in admission training sessions which

allow faculty to feel more comfortable talking to prospective students about the

admissions process, as well as the criteria for admission.

- **Reassess post-visit feedback process:** Robust, post-visit feedback will be required for

  Marietta College to continue evaluating the effectiveness of their on-campus recruitment

  programming. While some data does exist, that data lacked a depth of response and was

  cataloged inconsistently across admissions cycle years. Moving forward, reassessing the

  mechanisms for gathering this feedback will be crucial to understand the preferences of

  students and families as they engage with Marietta's slate of admissions programs. This

  evaluation should include how data is gathered, what questions are asked, and how that

  data is stored and utilized.

- **Engage Marietta city government and tourism officials on ways to incorporate the**

  surrounding area into campus tours more strategically: Marietta College and the city

  that shares its name flow seamlessly into one another, creating an open campus and

  community feel that could be better leveraged during the on-campus visit process. A

  recurring theme from our qualitative student interviews was that many students who

  ultimately enrolled at Marietta were looking for a comfortable, home-like environment to

  live and learn while in college, and the rural, small-town appeal of the city of Marietta

  could and should be utilized in attracting that type of student to the area. Some options to

  consider could include the creation of joint marketing materials that showcase the town

  and the college simultaneously, incorporating some parts of the downtown area into

campus tour stops due to proximity, and offering discounts at local restaurants and shops to students and families that visit campus.

Website & Virtual Student Engagement

- **Enhancements to Virtual Campus Tour:** Currently, Marietta College's virtual tour is very limited and does not provide the same level of engagement as an in-person tour. As this may be the only option for students, more visual enhancements are needed to actively engage prospective students and families, as well as showcase Marietta College's beautiful campus. This includes adding additional context about campus infrastructure, history, and/or student life. It also includes adding a live chat feature or pre-recorded student/staff video clips, etc. The campus tour should also be positioned more centrally within marketing materials and have the analytic capacity to track visits. This may look like a quick pre-student registration form for the virtual tour in order to track visits and send follow-up information to prospective students.

- **Create a Separate Student Portals for Current, Prospective & Accepted Students:** Marietta College's current website displays a lot of information at once for current, prospective, and accepted students. Although informative, this can cause a lot of confusion between competing parties, which results in visitors not receiving the intended information. By creating a separate portal for the intended populations, website visitors can clearly find their questions at hand. For example, the prospective student page will clearly show the application deadlines, offer a step-by-step description of the application process, and include class profile information such as GPA, academic standing, and standardized test scores. In general, creating separate student portals will allow the

institution to keep their content on target and visitors being overwhelmed with unrelated information.

- **Create a Visual Interest & Be Interactive:** One theme that continued to arise during the user experience interviews was the website lacked students "in action." Therefore, Marietta College's website should showcase more students within their virtual tour, homepage, and videos. This may include displaying a list of student involvement opportunities, as well as showing what students can do around the city of Marietta. The website should also create a student interactive page between current (student employees) and prospective students. This will allow prospective students to hear firsthand from current students about their experiences, and what they could expect going to Marietta College.

- **Create a Robust Internal Search Engine:** Marietta College's current search engine does not produce the most relevant results. This can be improved by identifying and targeting keywords or phrases for each webpage, publishing the most relevant information, and updating Metadata as the site changes over time.

- **Focus on Institutional Brand:** Make sure your website tells your story. This should include an easy-to-find "About Us Page", emphasizing strengths and student achievements, as well as highlighting graduation and student alumni.

- **Track Student Site Visits:** Incorporate Student Feedback Polls: Create a broad feedback mechanism for people to offer input, suggestions, and ask questions.

Discussion

Growing the first-year student cohort, and by extension, total student enrollment at Marietta has several major financial implications. Aggressive tuition discounting is a common enrollment strategy for liberal arts colleges, particularly for less selective ones like Marietta that lack excess student demand. However, continued utilization of this tactic results in downward pressure on the school's financial model as there are fewer real tuition dollars available to reinvest throughout the institution. Over time, the pool of institutional aid dollars is also exhausted, potentially resulting in budget deficits. Consequently, enrolling more students at Marietta will require a significant increase in institutional financial aid dollars. This infusion of financial resources could come from a variety of sources which include endowed scholarship funds or reallocation of existing institutional funds into the financial aid budget specifically for this purpose. Increasing Marietta's endowment and annual giving percentage to fund areas like student scholarships are current strategic priorities, though locating and cultivating these new revenue sources remains an ongoing challenge. Additionally, reducing financial flexibility in one part of the institution to fund this initiative, while well-intentioned, could create more downstream budget instability over time.

Embarking on a project of this nature will also require Marietta College to consider new and deeper strategic investments across several areas. Attracting new students, particularly from a wider range of geographic markets, may require increasing staff capacity within the Admissions and Financial Aid departments to engage in a broader array of on and off-campus recruitment programming. Locating new student prospects through partnerships with national recruitment initiatives like Questbridge and Posse, as well as targeted prospect name buys from organizations like the College Board and College Greenlight, should also be carefully considered as both have financial implications, e.g. start-up costs, staffing, financial aid resources, etc.

Enhancing the recruitment experience for prospective applicants through targeted messaging campaigns could also trigger new Marketing and Communications hires, as well as spending on technical infrastructure and fulfillment, as Marietta seeks to reassess their overall strategy in this area, e.g. print, digital, social media, etc. Creating a more analytical, data-driven approach to recruitment efforts might also necessitate spending on technical tools to support more nuanced data forecasting and enrollment projections, in addition to early alert systems and behavioral nudge software to assist in retention efforts once students are enrolled. A separate curricular analysis to identify areas for consolidation, elimination, or creation of new academic programs to ensure a viable mix of attractive major offerings could also prove useful.

Enhancements to the on-campus experience are also critical to ensure optimal student interest from prospective students, as well as supporting efforts to ensure that students retain and ultimately graduate from Marietta. A recent effort to gather current student feedback about potential improvements to the on-campus experience revealed a desire for changes in several areas, broadly categorized as Facilities, Dining, Academics, Community Involvement, Campus Resources, Campus Life, and Administration. While these categories are explained in more detail elsewhere, the primary takeaway from this feedback suggests a need to invest significantly in efforts to modernize Marietta's campus to make it more attractive both to prospective and currently enrolled students, as well as more user-friendly and student-focused. Generating the funding to address this feedback could come from several sources, including reallocation of initiative-based funds from other areas of the college, endowed gifts from private donors, or issuing of debt to finance the spectrum of capital project ideas identified by students.

Conclusion(s)

We anticipate that the findings of our research will add to the existing literature on best practices for small, private colleges facing challenges related to enrollment growth. Prior to the onset of the COVID-19 pandemic, demographic shifts in the college-going population and increasing competition for students created tremendous pressure on the financial model of these types of institutions, many of which were already highly tuition-dependent. As colleges like Marietta refocus their efforts to attract new student populations and maintain relevance in the higher education marketplace, we expect that insight from our work could potentially assist in that regard. While our findings may be somewhat limited in generalizability beyond Marietta, the research design and methods we intend to employ can be replicated to address the unique needs of a similarly situated campus.

Secondly, we expect that our final recommendations will inform the next phase of the institutional strategic planning process at Marietta College for 2023 and beyond. The current set of strategic priorities at Marietta encompass the 2021-2022 academic year and a significant portion of those plans set the stage for our capstone work in that enrollment growth is a major point of emphasis. The past two years at Marietta have established a positive admissions trajectory and our research and analytic findings will assist in enhancing those efforts moving forward as we engage with the President's Cabinet and other key stakeholders.

Appendix

IRB Forms

Vanderbilt University: Research Question 1

Human Research Protections Program – HRPP
Supporting the work of the IRB and Providing HRPP Oversight

RE: IRB #201780 "Peabody College Ed.D. Capstone 2020-2021 - Marietta College Enrollment Management Project (Financial Aid & Out of State Students)"

Dear Justina P Jones:

A designee of the Institutional Review Board reviewed the Request for Exemption application identified above. It was determined the study poses minimal risk to participants. This study meets 45 CFR 46.104 (d) category (4) for Exempt Review.

Any changes to this proposal that may alter its exempt status should be presented to the IRB for approval prior to implementation of the changes.

DATE OF IRB APPROVAL: 9/22/2020

Sincerely,

Kevin D Abner
Institutional Review Board
Behavioral Sciences Committee

Electronic Signature: Kevin D Abner/VUMC/Vanderbilt: (2de0a3cfa5370f8565121e8a372798a0) **Signed On**: 09/22/2020 2:18:26 PM CDT

Vanderbilt University: Research Question 2

Human Research Protections Program – HRPP
Supporting the work of the IRB and Providing HRPP Oversight

VANDERBILT

RE: IRB #201784 "Peabody College Ed.D. Capstone 2020-2021 - Marietta College Enrollment Management Project (Visit Experience)"

Dear Justina P Jones:

A designee of the Institutional Review Board reviewed the research study identified above. The designee determined the project does not qualify as "research" per 45 CFR §46.102(l).

(l) Research means a systematic investigation, including research development, testing, and evaluation, designed to develop or contribute to generalizable knowledge. Activities which meet this definition constitute research for purposes of this policy, whether or not they are conducted or supported under a program which is considered research for other purposes.

The purpose of this study is to evaluate the student campus visit and enrollment at Marietta College and the elements which led to the decision to apply and enroll. The study is non-research as it does not contribute to generalizable knowledge and is limited to Marietta College only.

Please Note: Approval is not extended to the submitted consent form as this study has been given a non-research determination.

As this does not meet the "criteria for research" as described in 45 CFR §46.102(l), IRB approval is not required.

Please note: Any changes to this proposal that may alter its "non-research" status should be presented to the IRB for approval prior to implementation of the changes. In accordance with IRB Policy III.J, amendments will be accepted up to one year from the date of approval. If such changes are requested beyond this time frame, submission of a

new proposal is required.

Sincerely,

Kevin D Abner
Institutional Review Board
Behavioral Sciences Committee

Electronic Signature: Kevin D Abner/VUMC/Vanderbilt:
(b508804296ef7225e2610242f4d7904f) **Signed On**: 09/22/2020
3:07:43 PM CDT

Vanderbilt University: Research Question 3

Human Research Protections Program – HRPP
Supporting the work of the IRB and Providing HRPP Oversight

**RE: IRB #201781 "Peabody College Ed.D. Capstone 2020-2021 - Marietta
College Enrollment Management Project (User Experience)"**

Dear Justina P Jones:

A designee of the Institutional Review Board reviewed the research study identified
above. The designee determined the project does not qualify as "research" per 45 CFR
§46.102(l).

(l) Research means a systematic investigation, including research development, testing
and evaluation, designed to develop or contribute to generalizable knowledge. Activities
which meet this definition constitute research for purposes of this policy, whether or not
they are conducted or supported under a program which is considered research for other
purposes.

Please Note: Approval is not extended to the submitted consent form as this study
has been given a non-research determination.

As this does not meet the "criteria for research" as described in 45 CFR §46.102(l), IRB approval is not required.

Please note: Any changes to this proposal that may alter its "non-research" status should be presented to the IRB for approval prior to implementation of the changes. In accordance with IRB Policy III.J, amendments will be accepted up to one year from the date of approval. If such changes are requested beyond this time frame, submission of a new proposal is required.

Sincerely,

Kevin D Abner
Institutional Review Board
Behavioral Sciences Committee

Electronic Signature: Kevin D Abner/VUMC/Vanderbilt: (042f83ed13031722d9a95bb834d57a09) **Signed On**: 09/22/2020 1:48:16 PM CDT

Marietta College: Research Questions 1-3 Combined

Marietta College

September 30, 2020

Re: HSC Protocol #09152020: Peabody College Ed.D. Capstone 2020-2021 -Marietta College Enrollment Management Project (Financial Aid & Out of State Students

To Justina Jones and Stephen Barber:

The Marietta College HSC has approved your research proposal through its own review process. We also acknowledge the Vanderbilt IRB approval that you submitted with your materials.

The project has approval for one calendar year from today's date as noted on this letter.

If you need to submit any further correspondence regarding this proposal, please include the assigned HSC protocol number.

Best of luck with your project.

Sincerely,

Alicia Doerflinger, PhD.
Interim Chair, Human Subjects Committee
765-532-4177
Ad001@marietta.edu

CHARTERED IN 1835

215 Fifth Street • Marietta, Ohio 45750 • 740.376.4000 • www.marietta.edu

Recruitment of Marietta College Research Participants

Research Question 2: Marietta College President's Email

Greetings Marietta College Students,

 During the 2020-21 academic year, Marietta College is pleased to be partnering with two

graduate students — Justina Jones and Stephen Barber — at Vanderbilt University. They are

conducting research that will help us enhance our campus tours, open house events, and other

on-campus admission recruitment activities. The overall goal is to increase student enrollment at

the College.

 I am reaching out to you today hoping that you will consider helping them with their research. If

you decide to participate in the study, you will spend about 1-hour with them on Zoom

answering some questions about your campus visit experience with Marietta College — either

alone or in a small group of 8 to 10 people. The conversation will be recorded so they have the

opportunity to analyze it later.

 There is no cost to participate and you will be compensated with a $10 GIFT CARD. If you are

interested in helping Justina and Stephen with their research, please sign up at

https://docs.google.com/forms/d/e/1FAIpQLSdcIgi5CZpHSe79b7bVofZfpSq7pZ5Kh1GC2OW

ZIhZkWYIXuQ/viewform?usp=sf_link.

 Remember that your participation in this study is completely voluntary, and if you have any

questions, please contact Justina at Justina.p.jones@vanderbilt.edu.

 Bring Forth a Pioneer!

Bill Ruud

President and Professor of Management

Research Question 2: Focus Group Recruitment Survey

Marietta College Student Focus Group

The focus group opportunity described below is designed to examine the most effective

strategies for attracting students to apply and enroll at Marietta College.

We are seeking students for a 1-hour focus group to answer some questions about your

undergraduate admissions recruitment experience with Marietta College, either alone, or in a

small group of up to 5 people. Each focus group will be conducted on Zoom and recorded for

later analysis.

Focus group findings will be used to enhance Marietta College's campus tours, open house

events, and other on-campus admissions recruitment activities towards the goal of increasing

student enrollment for Marietta College.

Consent Form

Principal Investigator: Justina Jones & Stephen Barber

Study Title: Admission Recruitment Strategies at Marietta College

Institution: Marietta College

This informed consent document applies to adults participating in the interviews or focus groups The following information is provided to inform you about the research project and your participation in it. Please read this form carefully and feel free to ask any questions you may have about this study and the information given below. You will be given an opportunity to ask questions, and your questions will be answered. Also, you will be given a copy of this consent form.

Your participation in this research study is voluntary. You are free to withdraw from this study at any time. In the event new information becomes available that may affect the risks or benefits associated with this research study or your willingness to participate in it, you will be notified so that you can make an informed decision whether or not to continue your participation in this study.

1. Purpose of the study:

The purpose of this study is to determine which elements of the visit experience were most effective in attracting first-year students to apply and ultimately enroll at Marietta College.

2. Procedures to be followed and approximate duration of the study:

We are asking you to spend about 1-hour with us to answer some questions about your undergraduate admissions recruitment experience with Marietta College, either alone, or in a small group of up to 5 people. The process will be recorded and taped. The recording and tapes will be changed into written form. The written documents will not contain any information that will identify you. Everyone involved in the study will be symbolized by a code, created by themes like sex, age and race (example: black female 22).

3. Expected costs:

There is no cost to you for being in this research study.

4. Description of the discomforts, inconveniences, and/or risks that can be reasonably

expected as a result of participation in this study:

The time you spend with us may be inconvenient to your schedule.

5. Anticipated benefits from this study:

The things we find out from this research study will be used to enhance Marietta College's

campus tours, open house events, and other on-campus recruitment activities. Through this

process, we hope to find ways to help increase student enrollment for Marietta College.

6. Alternative treatments available:

You do not have to be in this research study, if you don't want to.

7. Compensation for participation:

If you choose to be in this research study, you will be given a $10 gift certificate to make up for

the 1-hour of time you spend with us.

8. Circumstances under which the Principal Investigator may withdraw you from study

participation:

If you express discomfort about being in this research study or if you act inappropriate (i.e.

swearing, aggressive behavior such as fighting) with the study staff or other volunteers, the

Principal Investigator may withdraw you from the research study.

9. What happens if you choose to withdraw from study participation:

Any information you provided prior to your decision to withdraw will be destroyed and will not

be used as part of the analysis.

10. Contact Information:

If you should have any questions about this research study or possibly injury, please feel free to contact Justina Jones at justina.p.jones@vanderbilt.edu or Stephen Barber at stephen.g.barber@vanderbilt.edu

For additional information about giving consent or your rights as a participant in this study, please feel free to contact the Vanderbilt University Institutional Review Board Office at (615) 322-2918 or toll free at (866) 224-8273.

11. Confidentiality Information:

Other participants in your focus group will know how you answer questions. While we will discourage anyone from sharing this information outside of the group, we cannot guarantee confidentiality by other focus group members. We will do our best to keep all of your personal information private and confidential but absolute confidentiality cannot be guaranteed. Your information may be shared with institutional and/or governmental authorities, such as the Vanderbilt University Institutional Review Board if you or someone else is in danger or if we are required to do so by law.

First Name

_____

Last Name

_____

Marietta Student Email Address

_____

Student Classification

- ○ Freshman

- ○ Sophomore

- ○ Junior

- ○ Senior

- ○ Transfer Student

Age

- ○ 18 Years of Age or Older

- ○ Below 18

Acknowledgment: Informed Consent

- ○ I have read this informed consent document and the material contained in it has been explained to me verbally. All my questions have been answered, and I freely and voluntarily choose to participate.

- ○ I do not give consent to participate in this study

Marietta College: Visit Experience

Did you participate in a campus tour, special visit day, or both at Marietta College?

- ○ Yes

- ○ No

- ○ Both

Focus Group Sign Up

We are asking you to spend about 1-hour with us to answer some questions about your

undergraduate admissions recruitment experience with Marietta College, either alone, or in a

small group of up to 5 people. The process will be recorded.

Please select the preferred day & time for focus group participation.

- ○ Monday, November 2nd at 3:00 pm (EST)

- ○ Tuesday, November 3rd at 1:00 PM (EST)

- ○ Tuesday, November 3rd, 2:30 PM (EST)

- ○ Wednesday, November 4th, 1:00 PM (EST)

- ○ Wednesday, November 4th a 4:00 PM (EST)

- ○ Other

Research Question 3: Recruitment Email

Hi, my name is Justina Jones/Stephen Barber and I am a graduate student at Vanderbilt
University. I am seeking first-year students who are 18 or older to participate in my research
study about your admissions recruitment experience prior to enrolling at Marietta College.

If you decide to participate in this study, you will spend about 1-hour with us on Zoom
answering some questions about your campus visit experience with Marietta College, either
alone, or in a small group of 8 to 10 people. The process will be recorded for later analysis.
There is no cost to participate and you will be compensated with a $10 gift card.

The findings of this research study will be used to enhance Marietta College's campus tours,
open house events, and other on-campus admissions recruitment activities towards the goal of
increasing student enrollment for Marietta College.

If interested, please sign up using the following link:
https://docs.google.com/forms/d/e/1FAIpQLSdcIgi5CZpHSe79b7bVofZfpSq7pZ5Kh1GC2OW
ZIhZkWYIXuQ/viewform?usp=sf_link

Your participation in this study is completely voluntary. If you'd like to participate or have any questions about the study, please email me at Justina.p.jones@vanderbilt.edu.

Thank you very much!

Consent Forms

Vanderbilt University: Research Question 2

<div align="center">

Vanderbilt University Institutional Review Board
Informed Consent Document for Research

</div>

Principal Investigator: Justina Jones & Stephen Barber
Study Title: Admission Recruitment Strategies at Marietta College
Institution: Marietta College

 This informed consent document applies to adults participating in the interviews or focus groups

Name of participant: _____ Age: ____

The following information is provided to inform you about the research project and your participation in it. Please read this form carefully and feel free to ask any questions you may have about this study and the information given below. You will be given an opportunity to ask questions, and your questions will be answered. Also, you will be given a copy of this consent form.

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The purpose of this study is to determine which elements of the visit experience were most effective in attracting first-year students to apply and ultimately enroll at Marietta College.

2. Procedures to be followed and approximate duration of the study:
We are asking you to spend about 1-hour with us to answer some questions about your undergraduate admissions recruitment experience with Marietta College, either alone, or in a small group of up to 5 people. The process will be recorded and taped. The recording and tapes will be changed into written form. The written documents will not contain any information that will identify you. Everyone involved in the study will be symbolized by a code, created by themes like sex, age and race (example: black female 22).

3. Expected costs:
There is no cost to you for being in this research study.

4. Description of the discomforts, inconveniences, and/or risks that can be reasonably expected as a result of participation in this study:
The time you spend with us may be inconvenient to your schedule.

5. Anticipated benefits from this study:
The things we find out from this research study will be used to enhance Marietta College's campus tours, open house events, and other on-campus recruitment activities. Through this process, we hope to find ways to help increase student enrollment for Marietta College.

6. Alternative treatments available:
You do not have to be in this research study, if you don't want to.

7. Compensation for participation:
If you choose to be in this research study, you will be given a $10 gift certificate to make up for the 1-hour of time you spend with us.

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STATEMENT BY PERSON AGREEING TO PARTICIPATE IN THIS STUDY

I have read this informed consent document and the material contained in it has been explained to me verbally. All my questions have been answered, and I freely and voluntarily choose to participate.

_____   _____
      Date   Signature of volunteer

Consent obtained by:

_____   _____
Date   Signature

Vanderbilt University: Research Question 3

Vanderbilt University Institutional Review Board
Informed Consent Document for Research

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We are asking you to spend about 1-hour with us to navigate Marietta College's website, either alone, or in a small group of 2 to 5 people. During this simulation, you will complete a list of performing tasks. All tasks will be conducted via Zoom, an online video communication platform, and recorded for later analysis. The process will be recorded. The recording will not show your face or contain any information that will identify you. Everyone involved in the study will be symbolized by a code, created by themes like sex, age and race (example: black female 22).

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4. Description of the discomforts, inconveniences, and/or risks that can be reasonably expected as a result of participation in this study:
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5. Anticipated benefits from this study:

The things we find out from this research study will be used to better enhance Marietta College's website. Through this narration, we hope to share Marietta College's current website's usefulness, usability, value, desirability, and findability.

6. Alternative treatments available:
You do not have to be in this research study, if you don't want to.

7. Compensation for participation:
If you choose to be in this research study, you will be given a $10 gift certificate to make up for the 1-hour of time you spend with us.

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<u>STATEMENT BY PERSON AGREEING TO PARTICIPATE IN THIS STUDY</u>

I have read this informed consent document and the material contained in it has been explained to me verbally. All my questions have been answered, and I freely and voluntarily choose to participate.

_____   _____
            Date   Signature of volunteer

Consent obtained by:

_____   _____
Date   Signature

Marietta College: Research Question 2

Marietta College Institutional Review Board
Informed Consent Document for Research

Principal Investigator: Justina Jones & Stephen Barber
Study Title: Admission Recruitment Strategies at Marietta College
Institution: Marietta College

 This informed consent document applies to adults participating in the interviews or focus groups

Name of participant: _____ Age: ____

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6. Alternative treatments available:
You do not have to be in this research study, if you don't want to.

7. Compensation for participation:
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10. Contact Information. If you should have any questions about this research study or possibly injury, please feel free to contact Justina Jones at justina.p.jones@vanderbilt.edu , Stephen Barber at stephen.g.barber@vanderbilt.edu or Faculty Advisor Will Doyle at w.doyle@vanderbilt.edu.

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<u>**STATEMENT BY PERSON AGREEING TO PARTICIPATE IN THIS STUDY**</u>

I have read this informed consent document and the material contained in it has been explained to me verbally. All my questions have been answered, and I freely and voluntarily choose to participate.

_____   _____
       Date   Signature of volunteer

Consent obtained by:

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Date   Signature

Marietta College: Research Question 3

Marietta College Institutional Review Board
Informed Consent Document for Research

Principal Investigator: Justina Jones & Stephen Barber

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6. Alternative treatments available:
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STATEMENT BY PERSON AGREEING TO PARTICIPATE IN THIS STUDY

I have read this informed consent document and the material contained in it has been explained to me verbally. All my questions have been answered, and I freely and voluntarily choose to participate.

_____   _____

Date   Signature of volunteer

Consent obtained by:

_____   _____

Date   Signature

Interview Protocols

Research Question 2: Student Interviews

Interview Protocol
Marietta College - Student Visits and College Enrollment

Research Question: What is the relationship between student campus visitation and enrollment at Marietta College? For currently enrolled first-year students at Marietta College, which elements of their visit experience were most associated with choosing to apply and ultimately enroll?

Welcome & Introductions
We are asking you to spend about 1-hour with us to answer some questions about your recruitment experience with Marietta College, either alone, or in a small group of 8 to 10 people. The process will be recorded and taped. The recording and tapes will be changed into written form. The written documents will not contain any information that will identify you. Everyone involved in the study will be symbolized by a code, created by themes like sex, age and race (example: black female 22).

Icebreaker
   ● Introductions (Name, Year in School, Major, and Where the student is from)
Registration Experience
   ● How did you register for your Marietta visit experience, e.g. online, over the phone, etc.?

- What information did Marietta collect from you when registering?
- How did your registration experience differ from other schools you visited or were considering? Did you like Marietta's process more or less in comparison?

College Choice

- How did you first learn about Marietta College?
- What was your prior knowledge, if any, of Marietta College before visiting?
- What other colleges were you considering and why? Did you apply to all of the colleges you visited?
- What were you looking for in a college? What factors were most important to you when choosing a college?
- Did you visit any other colleges in addition to Marietta? If so, how many? How did the visit experience differ across institutions?
- How did you gather information for your college search? What was the most important source of information?
- As an out-of-state student, what was attractive about Marietta as opposed to a school in your home state?
- What were the reasons that you ultimately decided to attend Marietta?

Campus Visit Experience

- Did you participate in a campus tour, special visit day, or both? If you attended a special visit day, which one?
- How many times did you visit Marietta before enrolling?
- What aspect(s) of your visit experience did you enjoy most? Least?
- What would you change, if anything, about your visit experience? What could Marietta emphasize more or less about the student experience during these visits?
- What elements of campus were you exposed to during your visit experience, e.g. classroom/lab visits, student organizations, athletics, faculty/staff interaction, financial aid Q&A, etc.?
- Do you think your campus visit experience influenced your decision to enroll at Marietta College? If so how and to what extent?

Special Visit Day Experience

- If you participated in multiple visit experiences, which visit was most impactful in your choice to enroll? Why?
- In what ways did your special visit day experience differ from a traditional college visit?

Post-Visit Experience

- How did Marietta follow up with you in the aftermath of your visit? Did they send more information? Was there an invitation to return to campus for another visit?

Research Question 2: Staff Interviews

Interview Protocol

Enrollment Management Team, Marietta College

1. Can you describe the organization of the Admissions team at Marietta College, e.g. how many staff, what kind of functional teams, etc.?
2. Can you describe the ideal kind of student that Marietta College looks for? Are there any common characteristics of students who ultimately enroll?
3. In your conversations with prospective students and families, what broad factors do they mention as most important in selecting a college?
4. In your conversations with prospective students and families, what Admissions marketing messages do you think resonated most? Least?
5. What kind of analysis and strategy goes into deciding which areas to target for students?
6. What are your current recruitment strategies for students? What are your current yield strategies?
7. Can you describe the programs/events that are designed specifically to get admitted students to yield at Marietta? Which elements of those programs/events do you think are most effective? Which could be adjusted?
8. What are your current challenges? What approaches are you taking to address the challenges? Do you believe these strategies have been effective? Why or Why Not?
9. What are the challenges that you think contribute to student yield at Marietta remaining low over the last few years?
10. As student recruitment and yield continues to become a challenge in the upcoming years, what new demographic targets of students should Marietta focus on? Why? What new territories have you explored? Has it been successful?
11. How are you using technology and social media to attract students? Any areas of growth?
12. How do you think prospective students and families have responded differently to Marietta's virtual recruitment efforts vs. in-person?
13. What COVID-related elements of the recruitment process, if any, have remained as Marietta has shifted back to an in-person model?

Attendees
- Scot Schaeffer, Vice President for Enrollment Management
- Emily Schuck, Assistant Vice President for Enrollment Management
- Katie Fennell, Director of Admission
- Scott McVicar, Associate Director
- Layne Archer, Admission Counselor
- Amisha Herd, Admission Counselor
- Chandler Kuhn, Admission Counselor
- Jonah Mitchell, Admission Counselor

Interview Protocol

Tom Perry, VP of Communication and Brand Management, Marietta College

1. Can you describe the specifics of your role as VP of Communication and Brand Management and the nature of your day-to-day work?
2. When you began in your role, what did you perceive Marietta College's "brand" to be? In what ways, if any, has this "brand" and the communication of it changed in your time at the institution?
3. What are the key characteristics that Marietta College intends to communicate about itself?
    a. Externally, particularly to prospective students and families
4. Are there elements or characteristics of the institution that you think could be emphasized more? Less?
5. In what ways, if any, have branding and communication efforts evolved during your time in this role, specifically to support student enrollment growth?
6. In what ways have Marietta's branding and communication efforts changed specifically as a result of the COVID-19 pandemic?
    a. Do you anticipate any changes that have been made to continue permanently?
7. In what ways do you envision branding and communication efforts at Marietta changing in the coming years?
8. In light of market forces affecting liberal arts colleges specifically (demographic shifts, financial pressures, etc.), what do you think this sector of higher education can and should do to differentiate itself in the coming years?

Interview Protocol
Nate Knobel, Director of Web Strategy, Marietta College

1. Can you describe the specifics of your role and the nature of your day-to-day work as Director of Web Strategy?
2. When you began in your role, do you recall what your impressions of Marietta's web presence were?
    a. What was working well?
    b. What needed to change, or what elements were you tasked with addressing?
3. Key characteristics that Marietta intends to communicate about itself through the website?
4. What kind of feedback, if any, is gathered about the website? If so, how is it gathered?
5. What is the nature of internal feedback about the website?
6. What is the nature of external feedback about the website, particularly from prospective students and families?
7. In what ways do you perceive the website (as currently constructed) helps or hinders enrollment management efforts at the institution?
8. Is student feedback of any kind prioritized in the aforementioned feedback process?
    a. If yes, what do students typically say about the website and their use of it?

9. In what ways has the website evolved in your time as Director of Web Strategy?
10. In what ways has Marietta's web presence changed specifically as a result of the COVID-19 pandemic?
    a. Do you anticipate any changes that have been made to continue permanently?
11. In what ways do you envision the website changing in the coming years?
12. How can liberal arts colleges like Marietta better utilize technical and web-based resources to attract students?

Research Question 3

Interview Protocol
Marietta College - Website User Experience (UX) Simulation

Research Question: Using a narrative analysis, what is the user experience (UX) of prospective college students navigating Marietta College's website?

Icebreaker: Introductions

Welcome & Instructions:
We are asking you to spend about 1-hour with us to navigate Marietta College's website, either alone, or in a small group of 2 to 5 people. During this simulation, you will complete a list of performing tasks. All tasks will be conducted via Zoom, an online video communication platform, and recorded for later analysis. The process will be recorded. The recording will not show your face or contain any information that will identify you. Everyone involved in the study will be symbolized by a code, created by themes like sex, age and race (example: black female 22).

- Task 1: Please navigate to the page with information on undergraduate admission requirements. This includes application deadline(s) and other required forms.
- Task 2: Please navigate to the page where information on submitting an undergraduate admissions enrollment deposit is located.
- Task 3: Please answer the following questions? What is the cost of attendance at Marietta College for an undergraduate degree? Please navigate to the page where Marietta College scholarships are located?
- Task 4: Please identify an academic major of interest. Once selected, please locate the program or department webpage. Once found, please navigate to the page where the list of required courses is located to complete this academic course of study.
- Task 5: Please navigate to the web page that describes campus involvement opportunities such as student clubs/organizations.

Additional Questions
- What are your general impressions of the website?

- Which tasks were easier to complete and why? Which tasks were more difficult to complete and why?
- If you could rearrange any part of the website, what would you change and why?
- Are there any parts of this website that you think is already designed well and why?
- Would you be more or less willing to apply to this school based on your experience navigating the website? Why?
- Any additional comments or suggestions on Marietta College's website overall?

Quantitative Analysis

Research Question 1

Table 1:

2015-2020 Marietta College Applicants, Admits & Enrollees. (N=15,368)

	Applicants	Admits	Enrollees
Fall 2015	2,844	2,041	271
Fall 2016	2,684	1,649	238
Fall 2017	1,638	1,096	262
Fall 2018	2,846	1,962	343
Fall 2019	2,919	2,065	345
Fall 2020	2,437	1,802	338
TOTAL	15,368	10,615	1,797

Table 2:

RQ 2 Sub-question: Characteristics and Student Population Sample

	Population (approx. 1,129)	Sample (N=10)
Male	51.6%	30%
Female	48.4%	70%
First Time Enrolled (FTE) Fall 2020	29%	90%
White	85.8%	70%
BIPOC	14.2%	30%
Athlete (First -Year)	19%	20%
In-State (Ohio)	72.9%	80%

Table 3:

Top 10 Enrolled Majors for Out of State Students (2015-2020 Combined)

Enrolled Major 1	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	% of Enrolled Students
Exploratory	24	18	20	37	28	38	25% (164)
Petroleum Engineering	38	28	29	16	12	7	20.6% (130)
Health Science	2	2	6	9	2	2	3.6% (23)
Psychology	1	2	2	6	6	3	3.1% (20)
Land & Energy Mngt	7	4	4	1	0	2	2.8% (18)
Biology	2	3	1	6	3	3	2.8% (18)
Sports Management	3	4	3	6	0	0	2.5% (16)
Special Educ/ Elementary Dual	0	0	3	8	3	1	2.3% (15)
Biochemistry	4	3	2	1	3	2	2.3% (15)
Marketing	1	1	1	5	3	1	1.9% (12)

Table 4:

Top 10 Enrolled Majors for In-State Students (2015-2020 Combined)

Enrolled Major	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	% of Enrolled Students (Ohio) N= 1166
Exploratory	31	22	34	36	54	94	23.2% (271)
Petroleum Engineering	34	24	19	25	20	14	11.6% (136)
Biology	4	7	7	14	16	15	5.4% (63)
Psychology	7	5	6	9	12	14	4.5% (53)
Special Educ/ Elementary Dual			12	10	12	15	4.2% (49)
Biochemistry	9	4	11	5	8	8	3.8% (45)
Athletic Training	11	15	17				3.6% (43)
Health Science	4	4	4	9	15	6	3.6% (42)
Accounting	5	2	2	9	6	6	2.5% (30)

Table 5:		
Top 10 Enrollment Destinations for Admitted Students Other than Marietta College from 2015-2020.		
	Overall (N=6,144)	Ohio (N=4,150)	Out-of-State (includes International) (N=1,994)
1	Ohio University (OH) - 497 students (8.1%)	Ohio University (OH) - 483 students (11.6%)	West Virginia University (WV) - 150 students (7.5%)
2	Ohio State University (OH) - 261 students (4.2%)	Ohio State University (OH) - 252 students (6.1%)	Pennsylvania State University (PA) - 73 students (3.7%)
3	West Virginia University (WV) - 190 students (3.1%)	Kent State University (OH) - 162 students (3.9%)	Marshall University (WV) - 73 students (3.7%)

4	Kent State University (OH) - 165 students (2.7%)	Muskingum University (OH) - 149 students (3.6%)	Washington & Jefferson College (PA) - 33 students (1.7%)
5	Muskingum University (OH) - 157 students (2.6%)	University of Cincinnati (OH) - 135 students (3.3%)	West Virginia Wesleyan College (WV) - 32 students (1.6%)
6	University of Cincinnati (OH) - 139 students (2.3%)	University of Akron (OH) - 132 students (3.2%)	Fairmont State University (WV) - 29 students (1.5%)
7	University of Akron (OH) - 135 students (2.2%)	University of Mount Union (OH) - 109 students (2.6%)	West Virginia University at Parkersburg (WV) - 28 students (1.4%)
8	University of Mount Union (OH) - 119 students (1.9%)	Otterbein University (OH) - 109 students (2.6%)	John Carroll University (OH) - 24 students (1.2%)
9	Otterbein University (OH) - 114 students (1.9%)	Ohio Northern University (OH) - 95 students (2.3%)	University of Pittsburgh (PA) - 23 students (1.2%)
10	Marshall University (WV) - 112 students (1.8%)	Capital University (OH) - 95 students (2.3%)	West Liberty University (WV) - 22 students (1.1%)

Table 6:						
Most Popular Academic Majors at First Enrollment Destination other than Marietta College						
Engineering	Business	Health Professions	Natural Sciences	Social Sciences	Liberal Arts & Humanities	Other
Chemical Engineering	Accounting	Chiropractics	Agriculture	Criminal Justice	English	Ceramics
Computer Science, Computer and Information Sciences and Technology	Business Administration and Management	Dental Hygiene	Animal Sciences	Economics	General Studies	Emergency Management
Mechanical Engineering	Finance	Pharmacy	Biology, Biological, and Biomedical Sciences	Education	Interdisciplinary, Arts & Sciences	Homeland Security, Law Enforcement, Firefighting, and Related

	Marketing/ Marketing Management	Pre-Health	Mathematics	International Studies	Visual and Performing Arts	Protective Services
						Pre-Law
		Public Health	Natural Resources and Design	Communication, Journalism, and Broadcasting		
		Nursing	Physical Sciences	Political Science		
		Sports Medicine		Psychology		
				Speech Communication and Rhetoric		
				Music Therapy		

Table 7:					
Overall applied, admit and yield rate of students at Marietta College from 2015-2020.					
	Applicants	Admits	Enrollees	Admit Rate	Yield Rate
Fall 2015	2,915	2,112	271	71.8%	13.3%
Fall 2016	2,703	1,668	238	61.4%	14.4%
Fall 2017	1,644	1,102	262	66.9%	23.9%
Fall 2018	2,850	1,966	343	68.9%	17.5%
Fall 2019	2,915	2,061	345	70.7%	16.7%
Fall 2020	2,440	1,805	338	73.9%	18.8%
TOTAL	15,467	10,714	1,797	69.1%	16.9%

Table 8:						
Mean and standard deviation for applied, admitted and enrolled students from 2015-2020						
	Number of Applicants	% of Applicants	Number of Admits	Admit Rates	Number of Enrolled	Yield Rates
Variables						
Gender						
Male	8,740	56.9%	5,892	67.4%	1,056	17.9%

Female	6,622	43.1%	4,721	71.3%	741	15.7%
Race/ Ethnicity					
White	10,299	67.0%	8,011	77.8%	1,412	17.6%
Black/ African American	2,209	14.4%	997	45.1%	103	10.3%
Hispanic	689	4.5%	383	55.6%	58	15.1%
Asian	373	2.4%	220	59.0%	36	16.4%
Hawaiian/ Pacific Islander	23	0.1%	11	47.8%	2	18.2%
American/ Alaska Native	59	.4%	28	47.5%	4	14.3%
Two or More Races	825	5.4%	535	64.8%	74	13.8%
Race/ Ethnicity Unknown	891	5.8%	430	48.3%	108	25.1%
Standardized Test Score Ranges					
ACT < 19	2,526	9.8%	1,437	13.5%	249	13.8%
ACT > 19 < 23	3,519	22.8%	3,226	30.3%	540	30%
ACT >23 < 26	2,638	17%	2,533	23.8%	442	25%
ACT > 26 < 34	3,223	20.9%	3,084	29%	460	25.5%
ACT >= 34	222	1.4%	212	1.9%	21	1.1%
HS GPA Ranges					
HS GPA < 3.044	2,526	16.4%	1,437	13.5%	249	13.8%
HS GPA > 3.044 < 3.52	2,692	17.5%	2,497	23.5%	436	24.2%

HS GPA > 3.52 < 3.904	1,759	11.4%	1,688	16%	285	16%
HS GPA >3.904 <3.99	2521	16.4%	2,404	22.6%	353	19.6%
HS GPA >= 4	3561	23%	434	4.1%	106	5.8%
State of Residency						
In-State	9,187	59.7%	6,848	74.5%	1,166	17.0%
Out-of- State	6,232	40.5%	3,914	63%	670	17.0%
Other						
Pell Grant	1,885	12.3%	1,530	81.2%	408	26.7%
Non-Pell Eligible	5,632	36.6%	5,022	89.2%	1,257	25.0%
First Gen	1,885	12.3%	1,530	81.2%	408	26.7%

Table 9:

Financial Aid Award: Mean and standard deviation for enrolled students that applied and/or qualified for financial aid from 2015-2020.

	Enrolled					
	Financial Aid Award			*Unmet Need*		
Variable	*N*	*M*	*SD*	*N*	*M*	*SD*
Gender						
Male	949	$35,262.04	$11,963.82	941	$3,161.17	$9,088.77
Female	713	$37,581.97	$10,525.7	704	$2,489.21	$9,191.12
Race/ Ethnicity						

White	1366	$36,224.27	$11,254.67	1355	$2,338.36	$9,232.04
Black/ African American	99	$37,891.17	$12,129.1	98	$8,548.00	$5,309.435
Hispanic	53	$ 32,840.56	$11,048.12	52	$3,803.36	$9,722.77
Asian	12	$36,230.36	$10,232.03	11	$441.81	$10,893.91
Two or More Races	74	$37,606.29	$12,205.44	72	$5,881.04	$5,830.18
Race/ Ethnicity Unknown	52	$ 36,841.03	$13,007.53	51	$1,162.21	$10,615.39
Standardized Test Score Ranges						
ACT Score < 19	244	$37,534.19	$11,853.11	244	$7,085.52	$6,813.78
ACT Score > 19 < 23	427	$35,807.1	$12,111.24	420	$3,357.92	$8,260.38
ACT Score >23 < 26	276	$35,432.34	$11,021.74	274	$1,365.38	$10,139.51
ACT Score > 26 < 34	336	$35,736.83	$10,524.42	329	$364.77	$9,858.33
ACT Score >= 34	21	$35,943.86	$10,741.75	19	$2,046.78	$9,304.34
HS GPA Ranges						
HS GPA < 3.044	315	$34,972.16	$13,128.57	312	$5,965.615	$8,222.46
HS GPA > 3.044 < 3.52	445	$36,814.71	$11,996.52	442	$4,041.527	$8,000.81
HS GPA > 3.52 < 3.904	474	$36,589.34	$10,930.96	470	$1,938.36	$9,503.034
HS GPA >= 4	305	$36,630.61	$10,016.62	301	$443.0166	$9,534.05
EFC Ranges						
EFC <=0	376	$29,320.53	11,460.09	367	-9,894.376	8,845.008
EFC > 1710	463	$39,487.25	10,365.9	461	7,958.184	3,630.082
EFC > 1710 < 10327	423	$36,915.32	10,923.47	420	3,815.898	3,467.337
EFC > 10327 < 25045	0	0	0	0	0	0

EFC > 225045 < 222553	18	$24,063.39	8,069.846	14	-19,178.57	3,571.291
EFC >= 222553	0	0	0	0	0	0
Pell Grant Eligibility						
Received Pell Grant	637	$38,902.16	10,405.57	638	$8,611.64	$4,047.56
Non-Pell Grant	1025	$34,613.61	$11,720.89	1,007	$-761.81	$9,587.29
State of Residency						
In-State	1,121	$37,239.88	10,941.71	1,108	$3,213.77	$8,816.096
Out-of- State	541	$34,221.29	$12,122.26	537	$271.734	$9,733.943
Note: The average cost of attendance for Marietta College from 2015-2020 was $49,918.57.						

Research Question 2

Table 10:

Regression Analysis Summary for students' academic characteristics as a predictor of student enrollment

Constant	.025428 (1.36)
GPA	.0274072** (4.23)
ACT Scores	.0012786 (1.72)
Note:R-squared= 0.6845 No. Observ.= 11,435 **indicates significance at $p < .001$ level T-value in parenthesis	

Table 11:

Campus Visitation From Fall 2016-Fall 2020					
	Number of Applicants	% of Applicants Who Visited Campus	% of Students Who Visit That Enrolled	Number of Enrolled Students	% of Enrolled Students Who Visited Campus
Fall 2016	2,684	41% (1118)	18% (202/1118)	238	84% (202)
Fall 2017	1,638	43% (710)	30.1% (214/710)	262	82% (213)
Fall 2018	2,846	30.2% (867)	27.9% (242/867)	343	70.5% (242)
Fall 2019	2,919	16.5% (481)	37.7% (182/482)	345	47% (164)
Fall 2020	2,437	19.2% (469)	37.5% (176/469)	338	52% (176)

Table 12:

Campus Visitation: Students By Ethnicity (2016-2020)

	White	Black or African American	Hispanic	Asian	Two or More Races	Race/ Ethnicity Unknown	American Indian	Hawaiian/ Pacific Islander	Total Visits
Fall 2016	852	116	25	5	50	67	9	2	1126
Fall 2017	565	62	21	4	34	24	3	1	714
Fall 2018	722	39	21	6	43	34	2	0	867
Fall 2019	398	22	31	6	21	17	2	0	481
Fall 2020	415	12	10	5	30	1	0	0	473

Table 13:

Regression Analysis Summary for campus visitation predicting Marietta undergraduate enrollment (2016-2020)

Constant	.0313107** (6.10)
Campus Visit	.2381095** (31.79)
Note:R-squared= 0.1151 T-value in parenthesis No. Observ= 7,776 **indicates significance at p < .001 level	

Table 14:

Thematic Findings from Qualitative Interviews about Marietta College visit experience

	Theme 1	**Theme 2**	**Theme 3**
Information Gathering	Connections: Word of mouth & Alumni	Web Research	Directly Contacted: Test scores and/or Athletics
Campus Visit Experience	Intimate, personalized (perceived) interactions	Aesthetic appeal of campus	Comfortable, "home-like" environment
Post- Visit Follow-Up "I felt like they wanted me"	Consistent, ongoing institutional follow-up	Invited Back to Campus: Multiple visits were common	
College Choice Factors	Financial Aid	Campus Visit	Institutional Type & Size

Research Question 3

Table 15:

Thematic Findings from User Experience (UX) Task Interviews

Theme	Quotes
Visually Appealing	"I really care a lot about how colleges look and this one looks really pretty." "I really like the videos and pictures." "It looks like a cool place to go to." "(website) Definitely geared towards students."
"Information Overload": Long Categories	"It's a lot. If you knew what you were looking for, you could find it pretty well, but as a senior, I wouldn't know what this is." "Simplify links...very long list." "Other websites are a little bit more structured." "If I was just scrolling through a list of colleges and it was difficult to find information, I would have moved on." "It just feels like there's a lot going on...For me, it's a little bit too much sometimes." "Once you get the hang of it, it's easier." "It was kinda confusing."
Lacked Student "In Action"	"I don't know what to do on campus." "If they included students doing activities, I think it would be a little more personable." "Pictures should show students in action."

References

Belasco, A.S., Rosinger, K.O., & Hearn, J.C. (2015). The test-optional movement at America's selective liberal arts colleges: A boon for equity or something else? *Educational Evaluation and Policy Analysis*, *37*(2), 206-223.

Birch, M., & Rosenman, R. (2019). Is it the visit or the scholarship? An analysis of a special campus visitation program. *Education Economics*, 1–17. https://doi.org/10.1080/09645292.2019.1696750

Brown, J. K. (2010). An examination of undergraduate student recruitment procedures and activities at a Midwestern state university. *Enrollment Management Journal, 4*(3), 89-116.

Cabrera, A. S. P. (2014). First generation minority students: Understanding the influential factors that contributed to their preparation and decision to pursue higher education. *PSU McNair Scholars Online Journal*, *8*(1), 2-20

Cabrera, A. F., & La Nasa, S. M. (2000). Understanding the college choice process. *New Directions for Institutional Research, 107*, 5-22.

Center for Postsecondary Research, Indiana University School of Education. (2018). *About the Carnegie classification*. The Carnegie Classification of Institutions of Higher Education https://bit.ly/3uWKhW2.

Cochran, T. & Coles, A. (2012) Maximizing the college choice process to increase fit & match for underserved students. *Pathways to College Network.* Retrieved from https://files.eric.ed.gov/fulltext/ED585291.pdf

Cohen, S. (2009) What colleges don't know about admissions. *The Chronicle of Higher Education*. Retrieved from https://www.chronicle.com/article/what-colleges-dont-know-about-admissions/.

Cooper, C., and A. Burns. 2007. Kohonen self-organizing features maps as a means to benchmark college and university Web sites. *Journal of Science Education and Technology.* 16(3): 203–11.

Daugherty, O. (2020, May). *Tuition discounting at private institutions hits record high, NACUBO reports.* NASFAA. https://www.nasfaa.org/news item/21987/Tuition_Discounting_at_Private_Institutions_Hits_Rec.

Delucchi, M. (1997). "Liberal arts" colleges and the myth of uniqueness. *The Journal of Higher Education*, *68*(4), 414-426.

https://www.tandfonline.com/doi/pdf/10.1080/00221546.1997.11778991.

Ekman, R. (2014). The future favors smaller private liberal arts colleges. *Change: The Magazine of Higher Learning*, *46*(6), 24-27.

Ferrall, Jr., V.E. (2011). *Liberal arts at the brink*. Cambridge, MA: Harvard University Press.

Gube, J. (2010, October 5). What is user experience design? Overview, tools, and resources. Smashing Magazine. Retrieved from https://www.smashingmagazine.com/2010/10/what-is-user-experience-design-overview-tools-and-resources/.

Hayes, William. (2015). *The fate of liberal arts in today's schools and colleges*. Lanham, MD: Rowman and Littlefield.

Hesel, R. (2004). Know thyself: 5 strategies for marketing a college. *The Chronicle of Higher Education*, *50*(34). Retrieved from https://www.chronicle.com/article/know-thyself-5-strategies-for-marketing-a-college/.

Hill, C.B., Tiefenthaler, J., & Welsh, S.P. (2013). Economics and affordability. In R. Chopp, S. Frost, & D.H. Weiss (Eds.), *Remaking college: Innovation and the Liberal Arts College* (pp. 43-58). Johns Hopkins University Press.

Hamrick, H. (1996). Diverse information-gathering methods in the postsecondary decision making process. *Review of Higher Education*, *19*(2), 179–198. https://doi.org/10.1353/rhe.1996.0029

Johnston, T. (2010). Who and what influences choice of university? Student and university perceptions. *American Journal of Business Education*, *3*(10), 15–24. https://doi.org/10.19030/ajbe.v3i10.484

Lattuca, L.R. & Stark, J.S. (2011). External influences on curriculum: Sociocultural context. In

S.R. Harper & J.F.L. Jackson (Eds.), *Introduction to American Higher Education* (pp. 93-

128). Routledge Publishing.

Ma, J., Pender, M. & Welch, M. (2013) Education Pays. New York: The College Board.

https://trends.collegeboard.org/sites/default/files/education-pays-2016-full-report.pdf

Marcy, M.B. (2020). *The small college imperative: Models for sustainable futures*. Sterling, VA:

Stylus Publishing, LLC.

Marietta College. (2018). *Strategic Priorities 2017-2020*. Retrieved July 12, 2020, from

https://www.marietta.edu/strategic-priorities-17-22.

Marietta College. (2020). *Cost of attendance*. Retrieved from https://www.marietta.edu/cost

attendance.

Marietta College. (2020) *Endowment Support*. Retrieved July 12, 2020, from

https://www.marietta.edu/alumni/endowed-support.

Marietta College. (2020). *Marietta College: Facts and statistics*. Retrieved from

https://www.marietta.edu/marietta-facts-statistics.

Mayhew, L.B. & Hamilton, T.H. (1962). *The smaller liberal arts college*. Whitefish, MT:

Literary Licensing, LLC.

McPherson, M.S. & Schapiro, M.O. (1999). The future economic challenges for the liberal arts

colleges. *Daedalus*, *128*(1), 47-75.

Mattern, K. D., Woo, S. E., Hossler, D., & Wyatt, J. (2010). Use of student-institution fit in

    college admissions: Do applicants really know what is good for them? *College and*

    University: Educating the Modern Higher Education Administration Professional, 85(4),

    18-26.

Mentz, G., and R. Whiteside. 2003. Web promotion, techniques, and law. *The Journal of College*

    Admission. *181*(Fall), 10–17.

Nadworny, E. (2019, December 16). *Fewer students are going to college. Here's why that*

    matters. National Public Radio. Retrieved from

    https://www.npr.org/2019/12/16/787909495/fewer-students-are-going-to-college-heres-

    why-that-matters.

National Center for Education Statistics. (2019). *Marietta College*. IPEDS College Navigator.

    Retrieved from

    https://nces.ed.gov/collegenavigator/?q=marietta&s=all&id=203845#fedloans.

National Student Clearinghouse Research Center (2019). *Term enrollment estimates spring 2019.*

    Retrieved from https://nscresearchcenter.org/currenttermenrollmentestimatespring2019/.

Neely, P. (1999). The threats to liberal arts colleges. *Daedalus*, *128*(1), 27-45.

Nietzel, M.T. (2019, July 1). *Liberal arts colleges can regain enrollment with these four*

    strategies. Forbes Magazine. Retrieved from

    https://www.forbes.com/sites/michaeltnietzel/2019/07/01/liberal-arts-colleges-can-regain

    enrollment-with-these-four-strategies/#1e2d403d4314.

Ohio University. (2021). *Recognition and rankings*. Retrieved from

https://www.ohio.edu/admissions/about-ohio/recognition-rankings.

Okerson, J. (2016). *Beyond the campus tour: College choice and the campus visit*. ProQuest

Dissertations Publishing.

Pennsylvania State University. (2020). *Facts and rankings*. Retrieved from

https://www.psu.edu/this-is-penn-state/facts-and-rankings/.

Perry, Tom. (2018, November 8). *Marietta College trustees approve no tuition increase

for 2019-20*. Retrieved from https://www.marietta.edu/article/marietta-college-tuition-

2019.

Secore, S. (2018). The significance of campus visitations to college choice and strategic

enrollment management. *Strategic Enrollment Management Quarterly*, 5(4), 150–158.

https://doi.org/10.1002/sem3.20114

Stimpert, J.L. (2004). Turbulent times: Four issues facing liberal arts colleges. *Change: The

Magazine of Higher Learning*, *36*(4), 42-49.

Summers, J.A. (2004). Net tuition revenue generation at private liberal arts colleges. *Education

Economics*, *12*(3), 219-230.

https://www.tandfonline.com/doi/pdf/10.1080/0964529042000258581.

Tucciarone, K. (2009). Speaking the same language: Information college seekers look for on a

college website. *College and University*, *84*(4), 22-31.

U.S. Department of Education. (2020). Marietta College. The College Scorecard.

Retrieved from https://collegescorecard.ed.gov/school/?203845-Marietta-College.

U.S. News & World Report. (2020). *Marietta College*. Retrieved from

https://www.usnews.com/best-colleges/marietta-college-3073.

Western Interstate Commission for Higher Education. (2020). *Knocking at the College Door:*

Projections of High School Graduates, 2020. Retrieved from www.knocking.wiche.edu.

Zemsky, R. (1995). The nation's liberal arts colleges in an age of universities. *Policy*

Perspectives, *5*(4), 1-25. https://files.eric.ed.gov/fulltext/ED396593.pdf.