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Easing the Uncertainty: How an Interdisciplinary Learning-Living Program Helped Undeclared Students Make Academic and Vocational Choices

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Abstract: This article presents case study findings about undeclared student experiences in a two-and-a-half-year interdisciplinary learning-living program that integrates the arts, humanities, and social science disciplines. The study examined how the program helped students make informed decisions about academic majors and vocational choices. Participants were a cohort of juniors who had begun the program as first-year undeclared (non-major) students, and who were interviewed one month after program completion. Findings revealed the program developed students' recognition of curricular connections and thereby positioned undeclared students for increased academic and vocational clarity. Findings also revealed the program contributed to participants' overall student development resulting from engagement in a tight-knit, intellectual learning-living community.

Keywords: interdisciplinarity, learning-living community, general education curriculum, vocation, undeclared students, academic major

Introduction

Undeclared students who begin college without a specified major often lack a sense of direction in their academics and in their lives, and can benefit from exposure to a broad range of disciplines before declaring. Such range is found primarily within required general education courses traditionally taught in a single subject, distributed model approach. While exposure to disparate disciplines offers students variety, such curricular design limits integrative thinking and impedes students' ability to make connections across bodies of knowledge (Wells, 2016). Moreover, many students view general education courses as valueless curricular components and are unable to recognize why such knowledge is beneficial. For undeclared students searching for their

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niche, such required coursework may seem especially disjointed and unrelated to an academic major. Gordon and Sears (2010) suggest students "have limited understanding of how knowledge is artificially divided into smaller units or disciplines and how the sum of this knowledge is interrelated and intertwined" (p. xiii). Moreover, as Wells (2016) asserts,

We lack a common vocabulary that serves as a basis for integrative questions of meaning. The predominant idea that general education is accomplished solely by being "distributed" is compelling evidence on its own that undergraduate education has been drawn away from the center. (pp. 56–57)

An interdisciplinary curriculum strives to counter the disconnect between compartmentalized academic disciplines. Interdisciplinarity helps students learn to value diverse viewpoints and recognize the connections among parts of a larger whole (Orillion, 2009). Higher education leaders further acknowledge a need for more intentional practices that help students identify connections between college experiences, academic majors, and their futures careers and adult lives (Cunningham, 2016).

Significance of the Study

While previous research has explored widespread acceptance and implementation of interdisciplinarity in higher education, a notable gap exists in studies that examine how an interdisciplinary curriculum influences academic major choices and vocational awareness, especially among undeclared students. Expanding research to increase knowledge about how interdisciplinary programs like that examined in this study and described in this article contribute to students' academic decision-making processes can offer valuable insight.

This article also sheds light on undeclared students' understanding of vocation—a burgeoning topic in scholarly literature—and how their view of the concept can be developed through experiences in an interdisciplinary program. Wells (2016) asserts that "vocational reflection encourages us to affirm the major while also opening it up to integrative questions" (p. 61) that would connect it to future adulthood. Over the last two decades in higher education, multiple vocation exploration initiatives funded by the Lilly Endowment, Inc. have introduced programs to help students deeply ponder their academic choices and larger life questions about meaning and purpose in emerging adulthood (Parks, 2011; Clydesdale, 2015; Cunningham, 2016; Cunningham, 2017; Harward, 2016; Roels, 2017). Because vocational inquiry is infused within the program that is the subject of the study presented in this article, it is important to establish a contextual definition here. While the language of vocation used across the higher education landscape varies, for purposes of this research, I have relied on the definition used at the University of Dayton (UD), the top-tier research university rooted in the Catholic, Marianist faith tradition at the center of this case study. It states that vocational inquiry involves "answering a call to discover one's unique gifts and employ them in service for the common good in ways that are personally satisfying and bring meaning to one's life" (University of Dayton Vocation, n.d.). This concept of vocation encompasses both what an individual wants to do and the type of person one wants to become, embodying the institutional mission of learning in community and servant leadership. The concept is so valued as a hallmark of a UD education that it is an institutional learning goal. And with the creation of a UD vocation implementation team tasked with educating students, faculty, and staff about the concept of vocation, vocational programming and related curricular modifications have become ever more widely integrated across the institution.

Purpose of the Study

The purpose of this qualitative case study is to offer undeclared student perspectives on how the UD Core Integrated Studies (Core) Program—a two-and-a-half-year interdisciplinary learning-living program that integrates humanities, arts, and social science courses—fosters informed decision making about academic majors and vocational choices. Research participants included 13 juniors who began the program undeclared in fall 2016, and who were interviewed in spring 2019, one month after program completion. This article presents findings on five common themes that emerged about how the Core Program's interdisciplinary curriculum coupled with a tight-knit learning-living community helped students achieve clarity about academic and vocational choices.

Literature Review: Curricular Shifts in General Education

General education has undergone considerable change since its original inception and placement into the undergraduate college curriculum. Beginning in the early twentieth century, general education was the conduit for teaching "wellrounded students" (Nelson Laird et al., 2006, p.7). Key to the well-roundedness was a broadly framed curriculum that provided students liberal learning and knowledge of the larger world, distributed through humanities, natural, and social science courses (Gaff, 1994). By the middle part of the twentieth century, general education curricula were overshadowed by expanded and subdivided academic disciplines and the addition of specialized, professional studies. In the 1960s, due in large part to social movements, many institutions loosened

requirements, allowing students more latitude in choosing course options (Gaff, 1991). Subsequently, during the 1970s economic downturn, many students shifted from "impractical" liberal arts-focused coursework and opted for more "useful" fields (Gaff, 1991, p. 12). By the end of that decade, the haphazard state of general education had roused heavy scrutiny that birthed intensive reform initiatives by such highly regarded organizations as the Carnegie Foundation for the Advancement of Teaching and the American Association of Colleges and Universities (AAC&U) (Nelson Laird et al., 2006).

In the decades that followed and into the present, reform initiatives have become customary across the higher education landscape at the institutional level and beyond. Some reform efforts suggest a pivot back to early practices of prioritizing general education. In a 2000 national research study surveying 278 chief academic officers (CAO), 99.6% reported their institution placed higher priority on general education than it had just 10 years prior (Ratcliff et al. 2004, p. 10). However, a primary objective specified with overwhelming consistency in numerous general education reform studies is the importance of curricular cohesion (Gaff, 1991; Gaff, 1994; Ratcliff, et al., 2004; Hart Research Associates, 2016). And while cohesion is a widely shared aim for many institutions, it is often challenging to achieve with distribution models of curricular delivery (Ratcliff et al., 2004). Ratcliff et al. (2004) suggest "it is difficult [for students] to make linkages across courses developed, taught, and studied separately" (p. 13). Many institutions have become keen on prioritizing more innovative curricular practices that incorporate integrated approaches to academic work (Gaff, 1991).

Interdisciplinary courses, common learning experiences, and first-year seminars were among the top such innovative practices identified in the CAO study (Ratcliff et al., 2000)—findings that paralleled what Gaff (1991) had reported in a study 10 years prior. Equally significant findings from a second Ratcliff et al. (2000) study of general education administrators (GEA) revealed an increase in institutions requiring interdisciplinary coursework from just 19% in 1989 to 63.9% in 2000 (pp. 20-21). Moreover, required curricular themes and interdisciplinary courses were not only viewed as improving coherency, but also viewed as helping students make meaningful connections across disciplines and bridge content learned in class with experiences in the outside world (Ratcliff et al., 2004). In 2015, when the AAC&U sponsored a survey about trends in general education design, it found that 55% of its member institutions included interdisciplinary courses as part of their general education programs (Hart Research Associates, 2016, p. 11). Furthermore, the survey also reported 68% of its member institutions used integrative features, such as thematic coursework, learning communities, or a common intellectual experience, to name a few, to enhance the distribution model of general education (Hart Research Associates, 2016, pp. 12–13).

The scholarly literature on the implementation and execution of integrative learning offers a plethora of perspectives on curricular and pedagogical approaches (Klein, 2010; Lattuca, 2001; Newell, 2008; Orillion, 2009). Since the earliest developments of interdisciplinarity stemming from the likes of Alexander Meiklejohn's Experimental College at the University of Wisconsin-Madison (Van Slyck, 2006), interest in and implementation of integrative teaching have gained popularity across today's higher education landscape. Institutions of all types and sizes are exploring curricular structures and pedagogical techniques that respond to new understandings of the changing ways students learn and make meaning of their education. Liberal education particularly embraces interdisciplinarity, and the number of humanities and social science programs that are interdisciplinary markedly surpasses the number of such programs in natural and applied science (Holley, 2017). The AAC&U and its subsidiary Liberal Education and America's Promise (LEAP) program continually foster numerous nation-wide initiatives and partnerships to promote integrative learning (AAC&U, 2018). Lattuca (2001) contends that interdisciplinarity has "moved from the academic periphery to a more central scholarly location" (p. 3), due in part to faculty who are more innovative and eager than their earlier counterparts to disrupt the status quo and cross disciplinary boundaries. Moreover, many faculty who become accustomed to innovative, interdisciplinary teaching are disinclined to return to conventional pedagogy (Van Slyck, 2006).

I turn now to an overview of the interdisciplinary learning-living program at the center of this study.

The Core Integrated Studies Program

History

Implemented in fall 1985, the Core Integrated Studies Program originated from the University of Dayton's initiative to reevaluate the humanities' role within the general education curriculum (Johnson & Benson, 1996). University of Dayton administrators and faculty acknowledged the need for more cohesion within the curriculum, such that students could formulate connections among general education courses. The university tasked a faculty committee to develop a pilot program for implementing a revised universitywide general education curriculum. The new curriculum was to not only align with UD's overall mission as a Catholic, Marianist institution, but to also embody the mission of the College of Arts and Sciences, which emphasized a "values-oriented approach to education" (Johnson & Benson, 1996, p. 2).

Working with grant funds from the National Endowment for the Humanities (NEH), the faculty committee incorporated elements of a cluster concept and developed a set of coordinated courses around the common theme "Human Values: The Roots of Pluralism and Its Contemporary Expressions"

(Johnson & Benson, 1996, p. 2). A motto, "Core docet cor," Latin for "Core educates the heart," was created to signify the program's aim to provide students with a holistic learning experience that enabled critical reflection and values discernment in a diverse society and in the larger world (University of Dayton, 1998, p. 1). The program was designed to accommodate 150 first-year students and encompass many general education course requirements at the time, including those in history, philosophy, religious studies, natural science, arts, social science, and English composition (Johnson & Benson, 1996, p. 5).

Current Model

Throughout its 36-year history, Core course requirements have undergone numerous revisions; however, the initial framework remains intact, and the same common theme grounds the curriculum, though the statement of theme has been shortened to "Human Values in a Pluralistic Culture" (Johnson & Benson, 1996, p. 4). Today, Core is a challenging two-and-a-half-year interdisciplinary program integrating courses in the humanities, arts, and social sciences. All Core courses satisfy components of the university's general education curriculum. The program also doubles as a learning-living community where students engage in shared experiences in the classroom and in the residence hall. Open to students of all majors, the Core Program accepts approximately 120 first-year students, approximately a third of whom are undeclared students. Students matriculate into the program on a first-come, first-served enrollment basis. Most students learn about Core through recruitment efforts like university-sponsored open houses and mailings and through friend and family referrals of former Core Program students.

The Core Program curriculum begins in the fall semester of the first year and concludes after the fall semester of the junior year. Students in the first year take a two semester (15 credit hour), team-taught integrated course on the historical roots of Western and other world civilizations from the origins to the present, across narratives of history, literature, philosophy, rhetoric, and religious studies (Trollinger, 2018). The eight-person faculty team consists of two professors each from history, religious studies, philosophy, and English.

Most innovative in the first year, the Core Program is structured such that students meet twice a day (morning and afternoon), two times a week, for about six hours of weekly class time. Class meetings are split between one common morning lecture with the entire first-year cohort and smaller afternoon seminars of approximately 15 students each. The eight-person faculty team are present for morning lecture and take turns leading discussion of course content through the lens of their respective disciplines. Each member of the faculty team also leads one of the eight afternoon seminars where students discuss the morning lecture in more detail and analyze primary source material from the four disciplines the faculty represent. Students engage with course content and learn how to synthesize disparate views and make connections across disciplines through group work, essay exams, and research, plus writing assignments—including a historiography paper at the end of the second semester and a writing portfolio (Trollinger 2018). The writing portfolio assignment in particular prompts students to not only reflect on their writing progress, but to also express their thoughts on their learning in an interdisciplinary fashion, studying four disciplines simultaneously in one course (Trollinger, 2018).

During the second year of the Core Program, students complete three Core courses in the arts and/or social sciences, some of which are linked to continue the interdisciplinary curricular approach. Second year coursework focuses on the role of an individual within society (Johnson & Benson, 1996). Students learn about diverse communities and develop an understanding of and appreciation for civic responsibility. Many students participate in various service-learning projects in the local and surrounding community. The Core Program coursework concludes in the fall of junior year with a professional ethics course. The following spring a culminating celebratory ceremony is held for students; attended by Core Program professors, it is affectionately dubbed "Core graduation."

Methods

This study followed research guidelines and protocol in that I gained approval from the UD Institutional Review Board (IRB). The Core Program director also granted approval of the study and provided access to student names and contact information.

To explore how the UD Core Program fostered undeclared students' informed decision making about academic majors and vocational awareness, I addressed the following research questions:

- **RQ1.** How do Core students who begin the program as Discover Arts (undeclared) describe their process of selecting an academic major?
- **RQ2.** What role does the Core Program have in shaping Discover Arts students' academic major selection process?
- **RQ3.** What role does the Core Program have in shaping Discover Arts students' vocation discernment?

Guided by a constructivist research paradigm that is contingent on participants' positionality about a particular circumstance or phenomenon (Creswell, 2013), I sought to understand how participants constructed their own reality in reporting on specific decision-making processes about academic majors and vocational choices. Understanding how participants made meaning from experiences in the Core Program and how they used it to inform their decisions was key in finding answers to the research questions. The constructivist paradigm was also conducive to my study because of its frequent use of qualitative analysis, a fundamentally iterative and interpretive process.

Data Sample and Collection

I used purposeful criterion sampling (Mertens, 2015), and the sample included junior year Core Program students who had begun the program as Discover Arts' (undeclared) students—that is, as students who have potential interest in pursuing humanities, arts, or social science degrees. I chose junior year students because the Core Program concludes during the fall term of junior year, and students at this stage have experienced the program's entirety. All thirteen participants successfully completed the Core Program. Eleven participants were female and two were male; eleven were White, one was African American, and one was Latina.

As noted earlier, each year approximately one-third of the students in the Core Program are Discover Arts students. One hundred ten students comprised the 2016 Core Program cohort, and 31 of those students were Discover Arts. Thirteen out of these 31 Core Discover Arts students agreed to participate in the study.

To elicit a triangular strategy for data collection, I performed a document review of multiple Core Program artifacts including program flyers, brochures, and websites, all of which are unrestricted and readily accessible. Archived historical manuscripts such as course development grants, course sequence matrices, course development plans, and course syllabi were provided by the Core Program director.

Research data were collected using semi-structured, individual interviews. Interview questions pertaining to students' academic major selection process and vocational awareness were posed, along with questions pertaining to students' overall Core Program experience (see Appendix). To protect and maintain confidentiality, I assigned each student a pseudonym. Participants signed informed consent forms, and individual interviews were recorded with participants' permission. I took handwritten notes during each interview, and the audio recording was transcribed digitally. I reviewed interview transcripts for common patterns and coded for themes. Interview quotations used in the

¹ UD Discover Programs allow students to begin studies undeclared and explore majors by taking courses that fulfill general education requirements across the arts, humanities, social sciences (Discover Arts) and natural sciences (Discover Sciences). Students also take an introductory firstyear experience course designed to help students through the exploratory process (University of Dayton Discover Programs, n.d.). Discover Programs also exist in the UD School of Education, School of Engineering, and School of Business. study report were furnished to each participant to verify data accuracy and establish member checking (Creswell, 2013).

Findings

All participants had declared an academic major by the end of their second year in the program. My findings revealed participants thought the Core Program had varying levels of influence on their choice of major and discernment of vocation. Some students noted their Core Program experiences linked directly to their academic major choice and sense of vocation, while others noted a more indirect link. Five dominant themes emerged from the interviews that I defined as (1) academic navigation: the process by which students selected a major; (2) interconnections: students' recognition of connections between disciplines; (3) cognitive awareness: students' broad, critical thinking about academics and life values; (4) advocacy: students' desire to help others, and (5) relationships: students' rapport with peers and faculty.

Table 1 below provides a summary of the study's three research questions and the five themes that emerged through the students' answers to each research question. The fifth theme, relationships, though not directly tied to the research questions, was so pronounced in the data coding process that it is also significant and justifiably included in the findings.

Research Questions	Themes	Meaning
(RQ1) How do Core Program students who begin the program as Core Discover Arts (undeclared) describe their process of selecting a major?	Academic Navigation	The process by which students selected a major.
(RQ2) What role does the Core Program have in shaping Core Discover Arts students' academic major selection process?	Interconnections	Students' recognition of connections between disciplines.
(RQ3) What role does the Core Program have in shaping Core Discover Arts students' vocation discernment?	Cognitive Awareness	Students' broad, critical thinking about academics and life values.
(RQ3) What role does the Core Program have in shaping Core Discover Arts students' vocation discernment?	Advocacy	Students' desire to help others.
(No direct research question)	Relationships	Students' rapport with peers and faculty

Table 1: Themes associated with research questions

Analysis of Themes

Academic Navigation

Research question one addressed the student process of selecting an academic major. Participants shared thoughts about being an undeclared student and the steps they took to declare an academic major. Participants declared their academic majors at various intervals during their time in the Core Program. Three declared after just two semesters in the program and four declared after three. The other six participants declared after four semesters in the program, a time that coincided with the university-mandated deadline—the end of sophomore year. No students indicated the mandate had forced them to decide; rather, those who took longer to declare a major reported using the allotted time to fully explore interests through various coursework.

Regardless of the timeframe involved, many students described their navigational experiences as markedly stressful, ridden with anxiety and uncertainty, reflecting Freedman's (2013) assertion that requiring students to make an informed decision about an academic major before a thoughtful inventory of self is a significant expectation. Students frequently expressed feeling overwhelmed about making a choice. Katie said,

It's a really difficult decision to choose what you want to major in. A lot of people say, "Oh, don't worry, just because you major in this doesn't mean you have to do it for the rest of your life."

Interestingly, confinement in a career is a common fear many undeclared students face (Bures, 2011). Well-intentioned but ultimately unhelpful peer advice was also a repeated thought in the study. For example, Ella commented,

Being undecided was stressful the entire time because everybody's like, "don't worry about it, you'll figure it out, you have so much time." I wish people would stop saying that because that doesn't change how I feel about it. It's still stressful that almost all your friends are in their majors.

Ella wished her peers had been more empathetic. Ella's comments also showed her to be like students Cueso (2005) has described as those who delay declaring because they are careful thinkers who are cautious and methodical about making academic decisions. She was also among students who have difficulty declaring because they have multiple interests and want to study more than one discipline (Cueso, 2005). As Gordon and Steele (2003) suggest, the fundamental key to major exploration is coursework. Ella reported interests in political science, rhetoric, and writing, and though the additional coursework she explored through numerous semesters delayed her decision, it helped her ultimately declare as a double major. The Core Program director advises all Core Discover Arts students. This strategy provides special academic guidance to the undeclared students in the Core Program since all other Core students with declared majors receive advising from a faculty member or a professional advisor within the student's respective discipline. Many participants articulated how having the Core Program director himself as their advisor was particularly beneficial because he not only had in-depth knowledge about the program, but was also able to understand and support their unique academic needs. Victoria noted, "It was really helpful that my advisor was [the Core Program Director]. Choosing the major was probably the hardest part of my college career so far, but I think [it would have been] a lot harder without Core."

The participants also reported their responses to an exclusive first-year experience course taught by the Core Program director—another distinctive programming aspect. This introductory course served as an extension of his advising because it provided students with information about the multiple academic majors (and associated minors) within the College of Arts and Sciences. Cathy stated, "I think having [the first-year experience course] with other Core kids who were undecided was really helpful because it wasn't just like other kids were undecided, it was kids who were undecided and who were in Core." Students found the first-year experience course from the Core Program director coupled with the director's advising enhanced their academic major exploration.

Interconnections

Participants described how Core's interdisciplinary curriculum helped them not only recognize connections between academic disciplines, but also see how their interest in certain course content could inform their decisions about selecting a major. Katie said,

I think the interdisciplinary part of Core is probably the most important part. I realized how things connect in ways I didn't realize. And one of the biggest reasons I actually chose my minor in human rights studies is because Core's interdisciplinary process focuses so much on human rights it led me to where my minor is and made me realize what I wanted to do.

An integrated curriculum like that of the Core Program allows students to analyze information across disciplinary boundaries, scrutinizing (in this case) historical events through multiple perspectives, and enhancing their ways of interpreting such course content (Ivanitskaya et al., 2002). Students also learn to connect prior knowledge with new knowledge, integrating the two. They learn how multiple kinds of knowledge can help them analyze issues "too broad or complex for a single approach" (Klein, 2010, p. 181). According to Anne,

"[The Core Program] shaped how I took on every academic course. I try and make connections and build off some courses even if they seem unrelated." By learning to make connections within the Core Program curriculum and beyond, students shifted their perspectives about other coursework. Students broadened their approach to exploring other academic subjects and potential majors.

Some participants described how specific courses in the Core Program's second year, particularly those focused on community and experiential learning, shaped their academic major choices. Such learning exemplifies high-impact practices—those practices identified by Kuh (2008) as being extremely effective in promoting student engagement, retention, and overall student learning. Ella explained how an Amish country field experience helped her realize the potential of a visual rhetoric English concentration. Another student, Allison, explained how a Core Program class on the death penalty opened her mind to contemporary politics, helping to affirm her interest in political science.

While some students found the Core Program curriculum directly shaped their choice of academic major, others acknowledged a more indirect link. Nathan commented, "I think it's one of those things where [the Core Program] helps for secondary reasons not primary reasons." Other students described how Core helped them recognize common threads in humanities disciplines that might have otherwise gone unnoticed had they not taken a two-semester course sequence studying the narrative of world civilizations through the lenses of history, philosophy, English, and religious studies. Belle commented, "It was more interesting to study the humanities that way. It just makes sense to study them together."

Whether Core shaped academic major selection directly or indirectly, participants thought that Core influenced their choices. Anne captured this succinctly, saying,

I think [the Core Program] is really beneficial especially if [students] don't have a career path in mind because it'll give them those skills like critical thinking; it will open them up to new opportunities and it'll help them really decide what they like and what they don't.

Anne's insights shed light on how the Core Program curriculum can develop broader thinking to help students formulate connections that will be useful throughout their academic careers and future professional lives, as well. Students "exposed to the ways that different disciplines consider an issue . . . can begin to form a more complete and meaningful perspective and make more informed decisions" (Carmichael & LaPierre, 2014, p. 60).

Cognitive Awareness

Interdisciplinary courses are frequently credited with enhancing students' critical thinking and problem-solving skills, and for this reason, many of the current general education reform efforts include the implementation of interdisciplinary curricula (Orillion, 2009). My students described how the Core Program influenced their ability to think broadly and critically about academics, and about wider, more pervasive issues affecting their own lives and values. Tom said,

the things you study in [the Core Program] lectures and the different perspectives you're learning help open up your worldview and understand things from a way that you may not have tried before. [The Core Program] was extremely useful in development of thought processes.

Many other students also commented how Core shaped their deeper intellect. Charlotte said, "I just like the idea of being able to think differently than most of my peers. You're learning something for a reason, and you can basically tie in with everyday life." Another student, Belle, commented, "Even if we were talking about some time in history . . . I was always getting a deeper meaning out of it. It was always discussions that I felt applicable to the world today and to my life." As scholars have noted, an intentional pedagogical approach "that allows groups of students to turn their attention to common problems, issues, themes, or tasks . . . can prompt integrative learning if the topic is of sufficient scope and interest to be elucidated by insights from different disciplines and perspectives" (Huber et al., 2007, para. 9). My students were markedly mindful about how their active learning in the Core Program helped formulate big picture perspectives that affected the academic and vocational choices they were making.

Advocacy

A strong desire to help others emerged as a recurring theme in students' comments about the Core Program's influence on their vocational discernment, the subject of research question three. Participants had varying levels of understanding about the meaning of vocation, often using the words "vocation" and "calling" interchangeably, but their answers made clear that many students' deep attraction to helping others through advocacy was especially evoked through Core Program service-learning experiences such as tutoring at inner-city schools or volunteering at community service organizations². A Core project on food deserts fostered Michelle's interest in pursuing a certificate in non-profit and community leadership. Another student, Katie, explained that until she took a Core Program course on social inequality, she

2 Vocation is derived from the Latin verb *vocare*, meaning to call or name (Cunningham, 2016), and historically it has had theological connotations, specifically in reference to religious life. It was not until the work of Martin Luther in the 16th century that the concept of vocation began to expand to include others who were not members of the clergy (Kleinhans, 2016).

had not understood the intricacies embedded within the issue, and she ultimately declared a minor in human rights studies. Another participant, Allison, described her sense of vocation, saying,

I have a calling to do charity work. I'm not sure what that looks like in the future . . . but, I think being in Core and learning about different opportunities really led me to that path, and then I think that'll lead me to a different path.

For other students, a sense of calling was more obscure. Tom said,

I think the idea of calling is a pretty weird thing to think about. I don't know that I necessarily think I have a calling. It's not like some spiritual being beckoning me from beyond. I enjoy things and I care about certain things; and those needs to have a particular criterion met in my life are going to drive me to do things that I think will be useful.

Interestingly, while Tom denied a sense of calling, his remarks reflect developing awareness about his individual character and factors that will guide his choices in life. Such remarks suggest that even though some students do not identify the discernment process about what type of person to be or what type of work to do with a sense of vocation or calling, they have defined and experienced just that in their own way.

Most participants associated the concept of vocation solely with career, often conflating the two concepts and terms, indicating a narrow understanding of the former. The vocational literature offers a much more comprehensive view of vocation that includes multiple life aspects in which one can cultivate meaning and purpose (Cunningham, 2017). Vocational "language needs to *include* conversations about work and employment but should not be exhausted by those topics; it must be expansive in its capacity to attend to the many other aspects of a student's future life" (Cunningham, 2017, p. 9). The University of Dayton accepts this view. We know vocation can inform many non-career roles in life such as those involving family and friendships, community service, volunteer work, and even leisure pursuits (Fletcher, 2017). However, only one student who had attended a university-sponsored leader-ship retreat recognized vocation is really much broader in scope than a career. Ella commented,

I know your calling in [regards to] vocation isn't just your job. I think going on [the retreat] helped me to understand that more. And as a leader for [the retreat] you talk about your calling. I've learned how to be a person . . . how I want to act and treat others, and who I want to be

Ella's experience is significant because, as the university actively seeks to increase intentional programming in this area through the vocation implementation task force mentioned earlier, it suggests one additional way students may be brought to grasp a deeper understanding of vocation. As attention to vocation expands in the higher education landscape, more institutions, even secular ones, may also come to see vocation "is closely allied with concerns about meaning and purpose, about character development, and moral formation" (Cunningham, 2017, p. 3).

Relationships

Although not so directly responsive to my three main research questions, my findings about students' views of their relationships with peers and faculty were so pronounced, I have included them here as a prominent and significant theme. Because the Core Program is also a learning-living community where students from the same cohort not only take multiple classes together but also live with each other on designated floors in a residence hall, students spend a considerable amount of time together. Such consistent togetherness fosters tight bonds, friendships, and rapport. And it does more, much more. Learning-living communities are yet another type of high-impact, values added educational practice (Kuh, 2008). The literature shows students who participate in learning-living communities are more likely to be involved and interact with peer groups and professors than those in non-learning-living communities (Pike, 1999; Inkelas & Wiseman, 2003). And the literature shows such experience increases levels of student engagement, creates deeper student learning, and boosts retention (Kuh, 2008; Brownell & Swaner, 2009).

The participants in my study remarked how the communal atmosphere of the Core Program enhanced their learning. Anne said, "I had a solid base of intellectual students that I could bounce ideas off. It was very academically focused, but also just focused on being with holistically educated people . . . that environment was really beneficial." Katie shared, "You're constantly surrounded by people who are also going through that experience with you, which heightens how powerful it is and how much it affects you." Students valued the camaraderie peers provided and being part of an intellectual community with other students who valued the importance of learning. For many, the relationships built in the program were enormously impactful and a hallmark of their overall Core experience.

Many students also spoke of making connections and building rapport with Core professors. Students commented on how faculty took genuine interest in their successes. Ivy commented on how her professor's active engagement on campus impacted her own involvement at the university. Tom credited a Core professor for helping him form relationships with other students involved in a campus program to preserve the city watershed.

The findings about peer and faculty relationships demonstrate how a sense of community is nurtured throughout the students' time in the program, cultivating deep levels of student engagement. And they also demonstrate how that experience of engagement contributed to the students' overall sense of development. Ella remarked, "I think I've learned more about myself than I have about exactly what I want to do." Tom added, "I think generally the program as a whole has largely shaped my entire college experience rather than just some of the academic aspects of it." When asked where he would be had he not enrolled in the Core Program, Tom said, "I think I'd be substantially less happy." He further said,

I think early in college I probably would have been nervous enough that I would just throw myself into the first thing that seemed easy. And I would have taken an economics class and been like, "I'm going to do this until I figure out what I like," and then I would have gotten stuck in that for too long for me to find out what I like; and I think that can be very dangerous. I think Core helped me wiggle out of that because I was undeclared when I came in.

Clearly, these and the other comments I have reported on here demonstrate the broad range of impact the program has had on its participants from an academic, personal, and social perspective.

Discussion

This article contributes to the scholarly literature by offering insight on how an interdisciplinary learning-living program fosters informed academic decision making and vocational discernment. In particular, it expands scholarly knowledge about programs that may contribute to undeclared students' success in these important areas. As national organizations such as AAC&U and its subsidiary LEAP initiatives strongly advocate integrated, liberal learning programs, this study illustrates the benefits of such programming.

Themes drawn from the data reveal how the Core Program created a means for students, even the most undecided, to navigate the uncertainty of decision-making processes by immersing them in robust interdisciplinary curricular content, challenging course projects, and thought-provoking experiential opportunities, all while fostering a tight-knit intellectual community. The interdisciplinary curriculum coupled with the learning-living component of the program offered students a highly impactful experience.

The formative nature of the Core Program, especially in the first year, provided participants a framework to navigate difficulties about selecting a major. Advising from the Core Program director helped alleviate uncertainties related to academic navigation. So, too, did the director's dual role, teaching both the Core Program's first-year curriculum and the Core Discover Arts first-year experience course. Recurrent contact between the program director and Core Discover Arts students offered a strong support structure for undeclared students, not just "a once-a-semester meeting with a person the student

hardly knows, but an ongoing set of conversations about issues students are facing in real time" (Kuh, 2008, p.14). Key to assisting undeclared students is helping them recognize the factors contributing to their undecidedness, and helping them explore academic and career possibilities, while supporting their decision making throughout the process that does finally enable them to declare a major of some sort (Gordon & Steele, 2015).

Of course, vocational choices are as important as academic ones. Much of the growing literature on vocation exploration programs in higher education emphasizes the importance of students' formation of character through the fostering of values that will yield purposeful work and meaningful living (Clydesdale, 2015; Cunningham, 2016, Cunningham, 2017, Parks, 2011, Roles, 2017). Interestingly, one of Core's main objectives is related: to develop students' ability to critically evaluate "the value structure underlying their own choices, the choices of others, and the social structures of which they are a part" (Johnson & Benson, 1996, p. 4.) While most students in the study viewed vocation narrowly through an occupational lens, analysis of their comments revealed they saw the Core Program as providing opportunities to grapple with complex and meaningful questions about vocational adult life issues (more broadly defined) through integrated curriculum, course assignments, writing projects, and field experiences. While Core does not explicitly label aspects of its program vocation-specific, its components align with the university-wide learning goal of vocation. As noted earlier, UD is an institution that understands what the vocation literature suggests, that the sense of career calling is but one pathway to a purposeful life. And while "preparing graduates for employment is crucial, [it mustn't become so] to the point that we neglect the longstanding commitment of higher education to nurture a sense of purpose and social responsibility" (Wells, 2016, p. 57). As Harward (2016) asserts, college campuses should be places where students can be holistically engaged in conversation to understand such greater purposes as they might wish to pursue. Our students' comments suggest the Core Program provides them with a place to reflect on what vocation might entail for them.

Themes that emerged from this study also reveal how much our students benefit (and see themselves as benefitting) from the intrapersonal and interpersonal relationships they develop in the program. The findings indicate these relationships have a significant impact on students' overall Core experience, reflecting Astin's (1993) remark that "the single most important environmental influence on student development is the peer group" (p. xiv). One may conclude from the findings that the Core Program would be significantly less influential in the absence of the strong personal bonds that the learning-living aspect of the program cultivates. As Parks (2011) posits, "it is vital to recognize that a network of belonging that serves emerging adults . . . may offer a . . . powerful learning and social milieu and play a critical role in the formation of meaning, purpose, and faith" (p. 174). Through Core, transformative relationships with like-minded peers and dedicated, engaged faculty provide support that establishes a strong foundation not just for academic life but also for future adult life.

Limitations and Suggestions for Further Research

While this study addressed various curricular and co-curricular student experiences from each year of the two-and-a-half-year Core Program, it was limited to one sub-group of students-junior Discover Arts (undeclared) students who were studied at the end of the program. Thus, it was not a comprehensive study of all Core Program students throughout their time in the program. A larger, more diverse sample could provide further substantiation of the program's influences on its participants. A broader study could examine Core's influence on students who begin with a declared major and subsequently switch to a different major. An analysis of how the Core Program shapes students' change of major might provide further insight about the program's curricular impact on academic and vocational choices. Also, while my data have prompted me to posit a connection between the Core Program's interdisciplinary curriculum and the academic and vocational choices students make, a larger sample size and inclusion of faculty perspectives might provide further evidence to support the connection. Inquiry about how specific course assignments or experiential learning within the Core Program shapes students' academic and vocational choices might also provide additional substantiation of connection. Further research could examine quantitative data on student learning outcomes to empirically measure the development of students' interdisciplinary learning and the effectiveness of curriculum components in that regard. And finally, a study comparing how undeclared students make academic and vocational decisions in a non-interdisciplinary and/or non-learning-living community with how undeclared Core Program students do the same could provide further insight on best practices for supporting the undeclared.

Conclusion

Like most college students, the undeclared student population strives to make meaning of their education, seeking connections between specific academic majors and life pursuits after college. The process is difficult, especially for the undeclared student population who may remain academically undecided for multiple semesters. As Nash and Jang (2015) suggest, "college students . . . seek to find the delicate balance that exists in the difficult space between idealism and realism; macro and micro meaning" (p. 5). Institutions intentional about offering interdisciplinary learning-living models like the Core Program may help by serving students' deeper learning needs and fostering key developmental progression, thereby, "at the very least, . . . [allowing] students to develop a more holistic view of their world and to better understand the way they each can navigate in it" (Carmichael & LaPierre, 2014, p. 55). Students involved in an interdisciplinary learning-living community where they are not only introduced to multiple disciplines and the opportunities that lie in both disciplinary and interdisciplinary work but are also encouraged to augment their moral consciousness and cultivate a sense of self can be positioned for emerging adulthood in a manner that fosters increased academic and vocational clarity.

Biographical Note

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References

- Association of American Colleges and Universities (AAC&U). (2018). Retrieved from https://www.aacu.org/resources/integrative-learning
- Astin, A. W. (1993). What matters in college? Jossey-Bass.
- Brownell, J. E., & Swaner, L. E. (2009). High impact practices: Applying the learning outcomes literature to the development of successful campus programs. *Peer Review*, 11(2), 26–30.
- Bures, K. (2011, September). Why choosing a major is not choosing a career (... and not the end of the world)? *NACADA Academic Advising Today*. https://www.nacada.ksu.edu/Resources/Academic-Advising-Today/ View-Articles/Why-Choosing-a-Major-is-Not-Choosing-a-Career-andnot -the-end-of-the-world.aspx
- Carmichael, T.S., & LaPierre, Y. (2014). Interdisciplinary learning works: The results of a comprehensive assessment of students and student learning outcomes in an integrative learning community. *Issues in Interdisciplinary Studies*, 32, 53–78.

- Clydesdale, T. (2015). The purposeful graduate: Why colleges must talk to students about vocation. University of Chicago Press.
- Creswell, J.W. (2013). Qualitative inquiry and research design: Choosing among five approaches (3rd ed.). Sage Publications.
- Cueso, J. (2005). "Decided," "undecided," and "in transition": Implications for academic advisement, career counseling, and student retention. In R. S. Feldman (Ed.), *Improving the first year of college: Research and practice.* (pp. 27–48). Lawrence Erlbaum Associates.
- Cunningham, D.S. (Ed.) (2016). At this time and in this place. Oxford University Press.
- Cunningham, D.S. (Ed.) (2017). Introduction: Language that works. Vocation and the complexity of higher education. In D. S. Cunningham (Ed.), *Vocation across the academy. A new vocabulary for higher education* (p.9). Oxford University Press
- Fletcher, C. M. (2017). Laboring in the garden: Vocation and the realities of work. In D. S. Cunningham (Ed.). Vocation across the academy: A New vocabulary for higher education (pp. 183-203). Oxford University Press.
- Freedman, L. (2013, June). The developmental disconnect in choosing a major: Why institutions should prohibit choice until second year. *The Mentor: An Academic Advising Journal*. https://dus.psu.edu/mentor/2013/06/ disconnect-choosing-major/
- Gaff, J. G. (1991). New life for the college curriculum. Jossey-Bass, Inc.
- Gaff, J. G. (1994). Strong foundations: Twelve principles for effective general education programs. Prologue: The revival of general education. Washington, D.C., Association of American Colleges. https://www.agls.org/documents/ Awards/GaffAward/aac_Strong_Foundations_Twelve_Principles_for _Effective_General_Education_Programs.pdf
- Gordon, V. N., & Sears, S. J. (2010). Selecting a college major: Exploration and decision making (6th ed.). Pearson Education, Inc.
- Gordon, V. N. & Steele, G. E. (2003). Undecided first-year students: A 25-year longitudinal study. *Journal of the First-Year Experience*, 15(1), 19–38.
- Gordon, V. N., & Steele, G. E. (2015). *The undecided college student: An academic and career advising challenge*. Charles C. Thomas Publisher, LTD
- Hart Research Associates. (2016). Recent trends in general education design, learning outcomes, and teaching approaches. Key findings from a survey among administrators at AAC&U member institutions. Washington, D.C. https://www.aacu.org/sites/default/files/files/LEAP/2015_Survey _Report3.pdf
- Harward, D. (2016, September 14). The conversation all college students deserve to have. [Blog post]. https://www.aacu.org/leap/liberal -education-nation-blog/conversation-all-college-students-deserve-have
- Holley, K. (2017, April). Interdisciplinary curriculum and learning in higher education. Oxford Research Encyclopedia of Education, 1–23. http://oxfordre.com/

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education/view/10.1093/acrefore/9780190264093.001.0001/acrefore -9780190264093-e-138

- Huber, M. T., Hutchings, P., Gale, R., Miller, R., & Breen, M. (2007). Leading initiatives for integrative learning. *Liberal Education*, 93(2), 1–6.
- Inkelas, K. K., & Weisman, J. L. (2003). Different by design: An examination of student outcomes among participants in three types of living-learning programs. *Journal of College Student Development*, 44(3), 335–368.
- Ivanitskaya, L., Clark, D., Montgomery, G., & Primeau, R. (2002). Interdisciplinary learning process and outcomes. *Innovative Higher Education*, 27(2), 95–111.
- Johnson, P. A., & Benson, P. H. (1996). Human values in a pluralistic culture. In *CORE teaches the heart: Faculty reflections on general education*. Unpublished manuscript. University of Dayton Archives, Dayton, OH.
- Klein, J. T. (2010). Creating interdisciplinary campus cultures. Jossey Bass.
- Kleinhans, K. A. (2016). Places of responsibility: Educating for multiple callings in multiple communities. In D. S. Cunningham (Ed.), *At this time and in this place*. Oxford University Press.
- Kuh, G. D. (2008). High-impact educational practices: What they are, who has access to them, and why they matter. Washington, DC: The Association of American Colleges and Universities.
- Lattuca, L. R. (2001). Creating Interdisciplinarity. Vanderbilt University Press.
- Mertens, D. M. (2015). *Research and evaluation in education and psychology*. Sage Publications.
- Nash, R. J., & Jang, J. J. J. (2015). Preparing students for life beyond college: A meaning-centered vision for holistic teaching and learning. Routledge.
- Nelson Laird, T. F., Niskode, A. S., & Kuh, G. D. (2006). *General education courses* and the promotion of essential learning outcomes. Paper presented at the Annual Meeting of the Association for the Study of Higher Education, Anaheim, CA.
- Newell, W. H. (2008). The intertwined history of interdisciplinary undergraduate education and the Association for Integrative Studies: An insider's view. *Issues in Integrative Studies*, 26, 1–59.
- Orillion, M. F. (2009). Interdisciplinary curriculum and student outcomes: The case of a general education course at a research university. *The Journal of General Education*. 58(1), 1–18.
- Parks, S. D. (2011). Big questions worthy dreams: Mentoring emerging adults in their search for purpose, meaning, and faith. Jossey-Bass.
- Pike, G. R. (1999). The effects of residential learning communities and traditional residential living arrangements on educational gains during the first year of college. *Journal of College Student Development*. 40(3), 269–284.
- Ratcliff, J. L., Johnson, D. K., & Gaff, J. G. (2004). A decade of change in general education. *New directions for higher education: Changing general education curriculum.* 125(1), 9–28.

- Roels, S. J. (2017). Education for vocation: Weaving educational ideas with institutional practices. *Christian Higher Education*. 16(1–2), 92–106.
- Trollinger, W. V. (2018). ASI 110: The development of Western culture in a global context. (Unpublished course syllabus), University of Dayton, Dayton, OH.
- University of Dayton. (1998). *Core Program Handbook 1998-1999*. Unpublished manuscript. Dayton, OH.
- University of Dayton. (n.d.). Vocation. https://udayton.edu/ltc/development/ resources_faculty/vocation.php
- University of Dayton. (n.d.). Discover Programs. https://udayton.edu/ artssciences/academics/about/discover/index.php
- Van Slyck, P. (2006). Learning communities and the future of the humanities. Profession. 14, 163–176.
- Wells, C. A. (2016). Finding the center as things fly apart: Vocation for the common good. In D. S. Cunningham (Ed.), At this time and in this place (pp. 47–71). Oxford University Press.

Appendix

Interview questions

- 1. What was your level of indecision about selecting an academic major when you began Core as a Discover Arts student?
- 2. What was the main reason you began UD as Discover Arts?
- 3. What leaning, if any, did you have toward any specific academic major(s)?
- 4. What attracted you to the Core Program? How much did you know about the program?
- 5. Describe your process for choosing a major? When did you declare and what was your choice?
- 6. What challenges did you encounter during the process for selecting a major? Who or what helped you overcome those challenges?
- 7. Did the interdisciplinary nature of Core help shape your decision about your academic major selection? In what way? If not, what factors did help you decide?
- 8. Do you have a sense of calling or vocation about your future?
- 9. Did any particular Core experience shape your decisions about a sense of calling or vocation? If so, which experiences?
- 10. Tell me about your opinion of the Core Program?
- 11. Tell me one takeaway you have about your Core experiences?
- 12. What are your goals after UD?
- 13. Is there anything I didn't ask that you think is important for me to know?
- 14. May I contact you to follow-up or for clarification if anything is unclear?