

PERCEPTIONS OF NEW COLLEGE STUDENTS AT THE UNIVERSITY  
OF ALABAMA REGARDING THE ROLE AND VALUE  
OF INTERDISCIPLINARY STUDIES

by

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## ABSTRACT

Higher education offers students several approaches to learning. An interdisciplinary studies education is just one such option. Providing a unique educational model for students, this type of program allows students to expand beyond the traditional one major approach to focusing on several areas of interest, by creating a multidisciplinary plan of study. This research examines the perceptions of currently enrolled New College students at The University of Alabama regarding the role and value of participation in an interdisciplinary studies baccalaureate program.

In addition, a review of literature based on the history of interdisciplinary studies provided information on the vast contribution of experimental learning and its impact on higher education. However, the literature also highlighted numerous opposing views on perspectives of the role and values of the interdisciplinary approach in education. This document will further review the role interdisciplinary education plays in higher education. Furthermore, the type of interdisciplinary education environments will be explored. Additionally, the process of learning how students come to be involved in interdisciplinary programs will be reviewed and analyzed. Finally, the process of interdisciplinary education as it relates to student development will also be outlined in detail.

The literature created a foundation for the basis of understanding The University of Alabama's New College Interdisciplinary Studies Program, particularly the role of students. This research was conducted using a survey instrument with a six-point Likert scale to collect information from New College students on educational background, demographics, and length of

time enrolled in program. Further, questions regarding lifelong learning and student development were designed to measure students' responses regarding the value of interdisciplinary studies. Lastly, the remaining open-ended questions provided feedback on recommendations for improvements of the interdisciplinary program, as well as challenges faced within New College. Findings, conclusions, and recommendations for policy, practice, and future study are presented.

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## CHAPTER I: INTRODUCTION

Higher education has experienced several educational transformations over the years. During the 1960s and 1970s, the experimental colleges and universities were among the groups offering alternatives to traditional education (Kliwer, 1999). While these innovations created opportunities for interdisciplinary learning, they also presented challenges for alternative teaching. Interdisciplinary study, simply defined, is the blending of two or more disciplines to create a program of study. Interdisciplinary studies' programs target several developmental areas, but traditionally focus on critical thinking, problem solving, and creative thinking (Sternberg, 2008). This type of education promotes avid participation in life-long learning that expands beyond institutional educational settings. Numerous studies have explored the role of these innovative institutions as related to society, faculty, and staff; however, there seems to be a void in the literature on the student's point of view regarding interdisciplinary education. This study examined the perceptions of New College undergraduate students not external degree students at The University of Alabama, enrolled during fall and spring academic year 2010, regarding the role and value of an interdisciplinary studies baccalaureate program.

### **Purpose of this Study**

This study examined full-time undergraduate students enrolled during fall and spring academic year 2010 in The University of Alabama's (UA) New College interdisciplinary studies program. More specifically, the study addressed how students viewed the role and value of interdisciplinary studies related to their personal and academic development. With the growing

problems confronting today's society such as unemployment, global warming, overpopulation, environmental damage and universal educational system many employers and educators are looking to the expertise of an interdisciplinary complex thinker (Repko, 2008). In many cases, educators feel students have gained these skills, but limited research shows students actually believed they have acquired an interdisciplinary education. Due to this conflict, there is a pressing need for further research to expand the understanding of interdisciplinary studies. This study contributes to the growing body of literature while further providing insight on the students' perspective of education. The results of the study will be used to provide recommendations for further research in the area of interdisciplinary education.

### **Research Questions**

In an effort to achieve the purpose of this study, the researcher examined the following research questions:

1. In The University of Alabama's New College baccalaureate degree program who participated in this study what are the background characteristics (demographics) of students;
2. What range of topics and disciplines make up the Depth Study areas selected by students in The University of Alabama's New College baccalaureate degree program who participated in this study;
3. What attitudes and beliefs do students in The University of Alabama's New College baccalaureate degree program hold concerning:
  - a. The meaning of an interdisciplinary education,
  - b. The value of an interdisciplinary education,
  - c. Their reasons for choosing to seek a degree in UA's New College,

- d. The components of the UA New College degree program,
  - e. The value and benefits of completing a degree in UA's New College,
  - f. The skills and knowledge developed through participation in UA's New College,
  - g. The challenges faced in completing a degree in UA's New College,
  - h. The quality of education activities experienced in UA's New College,
  - i. The student's role and responsibility regarding governance and decision-making in UA's New College, and
  - j. The importance of life-long learning; and
4. How do these attitudes and beliefs differ based upon the following gender, race, and class (i.e., freshman, sophomore, junior, senior) of New College students?

## CHAPTER II:

### REVIEW OF THE LITERATURE

Understanding the educational landscape within higher education is important. This section explores interdisciplinary education literature from a student development point of view. In an effort to gain insight, this section first analyzes the value of experimental education specifically, and the interdisciplinary studies role within higher education. In addition, the researcher reviews the motivators behind college students' enrollment in interdisciplinary education. The role and value of interdisciplinary studies as related to impacting the college student experience are also examined.

#### **Historical Perspective of Interdisciplinary Learning**

Since the 1970s, there has been a growing interest in interdisciplinary matters in various fields of studies (Hugh, 1992). Individuals in different areas of education, from faculty to administration, involved in the growing discipline have varying viewpoints in looking at strengths versus weakness of the field. Supporters believe the interdisciplinary approach provides unique practical wisdom for students and solutions to challenging issues or problems that cannot be found in other areas (Hugh, 1992). However, practitioners against interdisciplinary learning argue the field has not been developed enough and lacks a real purpose within the larger setting of higher education. These groups also view integrative studies as having a foundational deficit and as only providing temporary solutions without sustainable gains (Benson, 1982).

Historically, students enrolled in interdisciplinary studies have had a limited voice in regard to how they view the field and its influence, whether negative or positive, on their educational development. To gain a better understanding of student perceptions, we must first

look at the birth and development of interdisciplinary education. The history of higher education provides an important framework to the understanding of modern day interdisciplinary education.

Pedagogical fads, workforce needs, national educational philosophies, and the economy all act as potential influences on the mission and vision of higher education. Consequently, as the U.S. progressed, the educational focus shifted in nature. According to Bok (2006), during the colonial college age, students were drilled on course material that was focused on science and language. After the Civil War, this transformation was followed by the emphasis of challenging students to specialize in an area of interest and to create knowledge for widespread dissemination (Clark 1987; Kerr 2001; Thompson Klein, 2005a).

Higher education in the 1900s was seen as a way for students to gain an education and actively serve society by contributing information to the existing body of knowledge. According to Rudolph (1990), “When college presidents thought of their students they were reminded not of society’s obligation to young men, but of the obligation of young men to society (p. 59).” The notion of societal good over the individual good did not last long. America changed to a more individualistic mentality, and colleges modified their mission to meet the desire of their students, not society (Rudolph, 1990). Some researchers felt this change was positive and created a more democratic approach to education, providing equal access to everyone (Knefelkamp & Schneider, 1997). While other scholars, such as Rudolph (1990), proposed this type of accessibility cheapened education and made college an environment of apathy. The change created a divide among the educational community, essentially forcing groups to decide if the change was beneficial or detrimental to America. These historical transformations provided an

ever-changing environment that was more conducive to expansion in higher education for various fields of learning.

Several colleges from across the nation embarked on creating institutions that looked at the students' personal and academic development as one responsibility of higher education. Conversely, schools including Keene State in New Hampshire, The University of Kansas, and The University of California created programs based on the college experience as a personal responsibility of the student (Kliewer, 1999). These conflicting philosophies concerning integrative learning were a growing trend within colleges and universities. Investment by the institution was becoming much more than a passing fad. A true level of commitment was developed, and became the example of possible integration of general education among interdisciplinary learning. These types of programs were monumental and seemed to be an accurate reflection of the integrative environment (Newell & Klein, 1996).

### **Interdisciplinary Education within Higher Education**

Based on the literature, there is not a true consensus of when interdisciplinary education originated. Many authors waiver between the implementation of interdisciplinary studies within education, compared to the general concept, as the true starting point of interdisciplinary work. Some researchers date the idea of interdisciplinary as far back as the Plato era, while others say the actual application was closer to the 1970s. Klein (1990) presented the concept of integration of knowledge being the work of Plato and Aristotle. Her theory being that interdisciplinary began as a philosophy not a concept. According to Thompson Klein, interdisciplinary studies is the “tradition of the American college, the study humanities of the Renaissance, the humanities and arts liberals of ancient Rome, and the of ancient Greece: (2005, 13).

Thompson Klein (2010) further traced the first usage use of the word *interdisciplinary* to the 1920s with literature in the area of social science. However, Stehr and Weingart (2000) have a different point of view. These researchers traced the earliest use of interdisciplinary to 1930s with literature in the area of the *hard sciences* that referred to Max Delbruck and works linking biological sciences with genetics, physics and mathematics. They supported the idea that the concept began in the area of science and not philosophy. Work by Jones and Smith (1984) claimed the earliest use of the term *integration* to be in 1855 by Herbert Spencer and in 1896 by William James. Spencer and James' writings on principles of psychology not only outlined the possibilities of integration, but also merged science with psychology. This work revealed that the concept of interdisciplinary had been proposed at some point during the Victorian period (1837-1901). Thompson Klein (1990) further noted, "the Social Science Research Council (SSRC) of the 1920s as a driving force of encouraging work across disciplines" (p. 14). Thompson Klein also proposed that interdisciplinary concepts were evident in the 1940s during the *Manhattan Project*, as varying disciplines joined together to develop the atomic bomb. Further, she pointed to the 1960s to 1970s as an age of merging interdisciplinary education with the rise of experimentation and the continued blurring of subject matter boundaries.

In her analysis, Klein (1999) posited scholars in the 1980s aimed to validate or justify integrative education to the broader institute of higher education. The perceived positive value of the program created several different paths for inclusion and increasing growth of integrative education studies. The expansion moved beyond the traditional focus areas and partnerships to include international studies, multicultural studies and gender studies (Casey, 1994). In the 1980s an unlikely connection between integrative education and honors programs was also identified (Newell, 1988, p10). The honors relationship showed great potential, drawing in such

pedagogical ideas as collaborative learning, learning communities, critical thinking and multiculturalism (Newell & Klein, 1996). The growing opportunities developed popularity in the field and created space for scholars to explore levels of interest within academia as it relates to interdisciplinary learning.

Several studies have been done to support the notion of interdisciplinary education becoming a core component of higher education. William Newell's work conducted in 1985-1986 revealed interdisciplinary studies programs in "every major geographical region and every institutional type from public, private, religious, and sectarian." Whether large or small, colleges and universities had interdisciplinary studies tracks that were "dominated by general education programs, of which two thirds were not alternative but institution-wide requirements" (Newell & Klein, 1996).

Among this group of scholars, Jerry Gaff's research extended beyond just colleges and universities to also include student involvement and perceptions. From 1989-1991, Gaff conducted research with over 300 hundred colleges to understand the students' participation in the field, as well as institutions with interdisciplinary programs as a part of their core courses (Newell & Klein, 1996). His results showed that over 67% incorporated interdisciplinary coursework in their core course concentration (Newell & Klein, 1996).

In more recent years, according to the 2006 US News & World Report of college and university rankings, 61.71% of all liberal arts institutions offer interdisciplinary studies majors. Further surveys reported 109 baccalaureate colleges have 99.7% of their students being taught with interdisciplinary methods. While, 65.42% of colleges expect to increase their interdisciplinary offerings over the next five years, with only 32.71% foreseeing no increase in

their interdisciplinary orientation but no decrease either. (Rhoten, Boix Mansilla, Chun, & Klein, 2006).

Throughout the literature, there is evidence to support the relevance of interdisciplinary education. In fact, there is a vast amount of research on the subject, but surprisingly, integrative education has had documented success without having a clear definition of the terms associated with it. Consequently, the literature has an identifiable discrepancy in that there is no generally accepted definition of interdisciplinary studies within the field of integrative learning (Newell, 1984). Integrative learning is seen by some “as the interdisciplinary approach in which two or more disciplines are brought together, in a way that disciplines interact with another and have some positive effect on one another’s perspective” (Rowntree, 1982, p. 135). A wealth of the literature uses a similar, even identical definition, but the definition seems to be limiting. Rowntree for example, has overlooked the student as an individual and their responsibility in the learning process. His writing during the 1980s, while progressive, essentially ignored the concept of the holistic student. It seemed the definition of integrative learning to him was directed more toward the field not the individual. Other researchers expanded on the definition to go beyond higher education and include the student development process.

Additional scholarly research painted interdisciplinary education as the capacity to connect information and types of thinking in two or more areas of education disciplines or establish area of expertise and to enhance cognitive advancement in areas of unachievable or unlikely through single disciplines (Boix Mansilla, Miller, & Gardner, 2000). The inclusion of cognitive development implies a higher order of thinking in which a person must have or be willing to attain an advanced breadth and depth of thought. In addition, Boix Mansilla, Miller, and Gardner touched on the notion of integrative learning as being a tool that can advance ideas.

This definition pushed the boundary of integrative learning to go beyond just education into supporting the notion that the field has value in the private sector as well.

A preponderance of the literature reviewed mentioned the responsibility of the individual student in regard to education, but Dressel, as well as Taylor Huber and Hutchings, were progressive in filling in large voids in the literature by identifying when they believe interdisciplinary learning happens for the student. According to their work, it occurs at varying intervals, based in part on the student's strengths, weaknesses, and preferred learning styles. Klein (2005) suggested integrative was a “broad term for structures, strategies, and activities that express experiences inside and outside of the classroom; interdisciplinary studies, however, is a subset of integrative learning that fosters connections among disciplines and interdisciplinary fields” (p. 8). Klein’s explanation for interdisciplinary work challenged other researchers because it highlighted the notion of integrative learning happening in all experiences inside and outside of education. Her definition implies integrative learning can happen in multiple settings as well, which was not proposed by other scholars.

Klein further suggested there should be a link among the disciplines for interdisciplinary work to occur. Frodeman, Klein, and Mitcham (2010) attempted to flesh out Klein's original definition by stating interdisciplinary education is a team effort to solve unique intellectual and societal issues, primarily in team teaching and research environments. The inclusion of a group effort to integrative learning perpetuates the idea of a collaborative approach to learning and teaching. The direction contradicts researchers such as Dressel, Taylor Huber, and Hutchings (2010) and their theory of individualism, but it highlights that integrative learning embraces the connection among groups.

Klein and Newell (1997), similarly to Frodeman, Klein, and Mitcham (2010), found that interdisciplinary studies is a process answering questions, solving a problem, or addressing a topic that is “too broad or complex to be dealt with adequately by a single discipline or profession and draws on disciplinary perspectives and integrates their insights through construction of a more comprehensive perspective” (pp. 392-394). Klein and Newell’s definition mirrors other researchers by stating integrative learning requires a critical thinker. The definition goes a step further than most by also presenting integrative learning as limitless, solving all or nearly all elements or aspects of something.

Each scholar offers a definition that reflects interdisciplinary learning; however, some researchers have more detailed explanations than others. A continual theme in the research conducted in the 1980s to 1990s was a stronger focus on integrative learning as the process of merging or finding a connection among disciplines or knowledge. Nonetheless, as the field of interdisciplinary education evolved between 1999 to 2010, the definitions became more in-depth and included the student development and college experience as components to achieve integrative learning. There seemed to be several apparent distinctions in interdisciplinary learning that went beyond the disciplines and synthesis or integration of information (Newell, 1984). The literature demonstrated clear trends that focused on student development, cognitive development, problem solving, collaboration, and critical thinking. Each area within interdisciplinary studies is a valuable aspect that contributes to the body of work on student involvement in integrative learning.

Within the literature, evidence to support institutes of higher learning’s ability to provide a quality education has always been prevalent, but the most successful approach to accomplish this task has not always been as clear. Higher education has experienced multiple transformations

and these philosophical shifts create an environment with fluctuating focuses. While there is an evergrowing body of literature in the area of the student's role in interdisciplinary education, the role of faculty seems to be elusive. Faculty, in most cases, are a college's strongest assets for knowledge delivery and transfer; however, with interdisciplinary education, it can be challenging. Discipline specific content and methodologies are the primary focus for many faculty and administrators within colleges and universities across the nation (Arum & Roska, 2011). Arum and Roska further (2011) suggested these areas are the primary targets in academia because the reward, recognition, accreditations, and advancement are all based on them.

While such aforementioned areas are valuable to the field of education, there are more interchangeable structures within the design of educational settings to support student learning (Barr & Tagg, 1995). Barr and Tagg (1995) expressed a need for change in the academy from an "instruction and teaching-centered model of education to one that is learning and student-centered" (p. 22). The authors further proposed that learning can no longer be considered just a knowledge transfer from the professorate to the students; rather, it must be an environment conducive to the students discovering and constructing their own knowledge (Barr & Tagg, 1995). This model focuses on the idea of institution buy-in for learning at all levels, from faculty to student. The theory outlines a structure that promotes learning for faculty to be evaluated beyond the traditional questions of classes being organized, faculty being prepared for class, or whether appropriate the material was covered. The learning paradigm focused on faculty being evaluated on providing learning opportunities in multiple ways for students. This type of model would provide the type of support needed for interdisciplinary education to flourish. Some authors within elementary education shared the same views, pointing out that education should be focused on the learner's experience (Dewey, 1956). By changing the focus to the student's

development instead of faculty teaching it creates a educational environment that benefits everyone. Most importantly, this creates a space where learning is not at the expense of any other aspects of higher education, but instead provides a synergistic environment.

### **Types of Interdisciplinary Integrated Environments**

The literature further outlines additional factors in which an educational space is created that supports student centered teaching environment. Multiple types of environments have been identified, but learning environments vary in their degree of integration (Armstrong, 1998). Each environment contributes to the educational development of students differently. Building an environment that provides a space in which students have the freedom to study within many disciplines is the first factor that Armstrong outlined. Next, students should be afforded the space to discuss and reflect what they learned in the various disciplines, creating an open dialog and exchange of ideas. Furthermore, this type of environment can challenge students to learn how to create concepts; more specifically, forming compound concepts, or connecting and summarizing terms that bridge integrative understanding. This principal formulated a new approach of inquiry across multiple disciplinary boundaries. In addition, Armstrong outlined the third theory as being the faculty and students working within subject matters that create synthesis. This portion gives students a space to be exposed to separate ideas and collect elements to form a coherent result. However, Pintrich (1996) challenged this theory by outlining using synthesis as Armstrong stated is not interdisciplinary, but more multidisciplinary. Furthermore, Pintrich pointed out that synthesis cannot be used in all cases. Some types of knowledge are so qualitatively distinct that they cannot permit integration under any circumstances.

The final stage to creating an educational learning environment is the ability to provide a space for mutual views of one subject to build a more whole cohesive solution to a problem: the

idea of creating an environment where several options are supported and providing a space for students to create a more complex explanation of how problems are solved (Miller & Boix Mansilla, 2004). Situations that do not allow for this type of integration within a collaborative subject are seen as “mutual ignorance” based on the Miller and Boix Mansilla model. In addition, these authors explained that stereotyping across disciplines can serve as an impediment to successful collaborative learning environments. Lastly, individuals participating in interdisciplinary learning should aim to blend, also known as merging, new information to see the world thru a new perspective (Miller & Boix Mansilla, pp. 13-14).

Various researchers provided insight on the types of integrated learning environments that can help create a teaching space for students. However, these models seem to be very general and non- specific on the types of programs that can support this model. The idea of integrating is further explored in the literature, specifically the environmental variables that can affect a student’s experience. These environments are key components to creating a well-rounded student that can connect with others (Boyer, 1987). This relationship goes well beyond just the student, but to the higher education administration as well. This connection is so important it is seen as a key measurement to the development of students in college (Knefelkamp, 1984; Piaget, 1968). A key point in the literature was the intentional creation of environments for student learning. Many educators would further agree when creating such environments, learning outcomes should be considered (Baxter Magolda & King, 2004; Fink, 2003; Gabelnick et al., 1990; Haynes, 2002a; Kuh, 1996). To ensure that integration happens, several authors revealed that it is a shared responsibility among students and faculty. In fact, some researchers believe that integration is the primary responsibility of students (Dressel, 1958; Newell, 1998b; Seabury, 1999b). However, the road of teaching students how to be agents of

their own integrative learning experience can be full of obstacles. Conversely, Taylor Huber and Hutchings (2004) pointed out that academic departments rooted in discipline only mentalities were hindrances for students trying to create integrative learning environments.

### **The Process of Interdisciplinary Learning**

Much of the literature presented conflicting views on the process of interdisciplinary learning. Many would agree learning is the goal of the majority of colleges and universities. In fact, recurring themes in the literature revealed learning happens outside the classroom (Kuh, 1993; Kuh, Douglas, & Ramin-Gyumek, 1994; Terenzini, Pascarella, & Blimling, 1999). However, these out- of- class experiences are valued differently as related to integration. Many professionals, but mainly student affairs staff, identify the out of class experience as having value in higher education (NASPA, 1989; Stage et al., 1999). Nevertheless, all out- of- class experiences, from sports to theater, are not designed to promote cognitive development or learning.

College and universities share several overarching goals. One key focal point is the goal of providing learning opportunities for students. While students share learning happens outside of the institution of higher education for them, many out of- classroom opportunities can be valued differently as they relate to integration outside of the classrooms (Kuh, 1993; Kuh, Douglas, Lund, & Ramin-Gyumek, 1994; Terenzini, Pascarella, & Blimling, 1999). Professionals within student affairs assert their work is largely dedicated to the out- of- class learning experience of college students (NASPA, 1989; Stage et al., 1999). In fact, out- of- class experiences are supportive of integrated learning (Pascarella, 2001a; Pascarella et al., 1996).

Further, researchers focused on the role of teaching as it relates to integrated environments. Learning can be measured in multiple ways, grade point average (Astin, 1993) or

scores on tests (Whit et al., 1996). By using these traditional means of grading, faculty have an idea of the effectiveness of their teaching methods. However, in terms of integrated learning, there seems to be limited ways to measure the effectiveness. Faculty must play a part in engaging in activities that support this type of assessment. Interdisciplinary scholars have done extensive work dealing with the ideologies of integration, but have often overlooked that there are several ways to achieve an interdisciplinary education (Seabury, 1999c; Thompson Klein & Newell, 1997). Researchers such as Thompson Klein and Newell contributed to the knowledge base by exploring a spectrum of traditional and non-traditional approaches to interdisciplinary teaching. These authors explored how to identify if the span of work within interdisciplinary education is yielding the desired results of learning. Measuring the goals of interdisciplinary learning is highlighted as a primary goal for this author as a way to see if learning is occurring. One of many solutions to gain the assessment information is through the use of learning communities. Learning primarily from team teaching in learning communities can help build in a support system for assessment (Haynes, 2002b).

Educational philosophy and cognitive psychology are among the most recurring highlighted disciplines within the higher education literature as student gains of experiential learning (Kolb, Boyatzis, & Mainemelis, 2001). Students can benefit from these experiences in several ways. Kezar and Rhoads (2001) presented commonalities in the types of projects that students were involved in with civic or social responsibility programs. Service-learning is a recurring example in the literature, in which interdisciplinary learning is a desired goal as it relates to social responsibility and empathy (Kezar & Rhoads, 2001). Jones and Abes (2001) presented service learning as a more detailed effective form of teamwork, self-actualization and community engagement. While individual learning and student responsibility are a few key areas

that authors focused on as valuable part of the interdisciplinary process, many researchers further supported problem based learning because it supports critical thinking (Cooper, Robinson, & McKinney, 1994).

Seabury (1999c) however proposed general education as a way to achieve integration. While other authors discussed the tools of integration as it relates to interdisciplinary inquiry. Stember (1998), for example, focused on comprehensive reasoning or the use of finding similar themes within interdisciplinary learning. Furthermore Kockelmans, challenged Stember by expanding the components to being interdisciplinary to include using language in an effort to find common ground and ignite questions 1998. Lastly each area can be achieved needs to be considered when to identify ways to create an interdisciplinary process (Bonwell & Eison, 1991; Hake, 1998; Halpern, 1994). In the event that these strategies are approached correctly these philosophical approaches could support integrative learning in multiple environments.

### **Student Development as it Relates to Interdisciplinary Education**

Interdisciplinary learning happens in several unique ways, with many authors indicating this type of learning occurs when students recall or recite information. However, Dressel (1958) believed in more than simply recalling information, but students having the ability to gain and learn new knowledge continually for all environments. Cognitive development theories by Piaget (1963) showed the connection of new information with existing mental structures is the process of assimilation and accommodation. Assimilation, by Piaget's definition, is the process of when individuals learn new information in an attempt to make it fit into existing learning structures. While assimilation is the act of information being forced into a framework where there is limited understanding and knowledge, sometimes forcing the reinterpretation of this unfamiliar information so that it will fit neatly within previously existing knowledge. Organizing

the information to make mental meaning of it is one of the key challenges students face (Bloom 1956). The way students can attain this level of understanding is by reconstructing the existing current mental understanding. Kolb (1984) pointed out in his experiential learning theory “learning is a process not an outcome and one must be willing to participate in it (p. 15). Kolb proposed that experience will help with the process and aid individuals to become intellectual thinkers while promoting mental development.

In 1978, Vygotsky argued that engagement is important, but learning cannot happen unless students are involved with others who have gained more knowledge. His Zone of Proximal Development theory revealed that having the assistance of a more experienced person can help students reach higher developmental goals (Vygotsky, 1978, p. 86). This process cannot be obtained without making meaning of the learning process, particularly the value of knowledge and experience. To understand meaning, students must be able to self-reflect on their experiences (Baxter Magolda, 2004; Mertens, 2005). This idea is founded on “constructivism” which is based on learning happening within the student him or herself, but can be promoted by anyone (Cobb, 1994; Phillips, 1995; Woods & Murphy, 2002). These perspectives of learning promote active engagement among students, however these theories seem to have excluded when students have the developmental capacity to participate in this process.

Several researchers have identified how development should proceed, but have missed the mark on how students understand the process of development. A study conducted in 1981 by Perry addressed this fact by looking at the process of the way students see society. Perry (1981) distinguished nine points, which are succinct into four groups: dualism, multiplicity, contextual relativism, and commitment in relativism. Perry explained that in the stage of dualism students rely heavily on authority figures to make choices for them. In addition, the world is only seen as

right or wrong and the student's attitude at this stage is one of apathy to most issues. While multiplicity, by Perry's definition, is believed to be the stage when students are open to diverse opinions; but, with the inability to comprehend them in detail. However, at this stage, students are passionate people and have the ability to form their own opinions and cannot be wrong about them. In relativism, Perry pointed out that students build on multiplicity by identifying that options must have support in all contexts to have validity. At this stage students are able to see the complexity of the options and identify if they are valuable or worthless. Lastly, at the stage of commitment students are aware and pro-active about choices in life and insistent about being involved with the world (Perry, 1981).

The positions within this theory highlight development can happen both internally and externally, depending on the stage in which a person is. Perry's theory also identified that development for students is a journey that will involve some pauses and acceptance of personal responsibility. Perry estimated that growth in all these areas will occur at anytime, but in most cases development happens in transition between the stages. The positions outlined by Perry are clear indications that students have a developmental process to go through, as they become interdisciplinary learners. While this work provided relevant information to the body of literature on interdisciplinary education, it unfortunately excluded women. The work by Perry was conducted at Harvard University with a survey population of only males, sorely limiting any generalizability.

However, work in 1986 by Baxter Magolda reviewed the concept of how women fit in to the picture in terms of understanding information. The Epistemological Reflection Model, which emerged from a 16-year-long longitudinal study of young adult's development from age 18 to 34, detailed knowledge and knowing as part of the student's overall epistemological

development (Baxter Magolda, 1992). Within this model, knowing is presented as factual and being taught by authorities. Knowledge in this model is seen as certain and concrete, with limitations on who can participate in the process. Baxter Magolda highlighted knowledge at this level as being about “receiving a preference for listening, mastering, and a preference for asking questions while engaging with authority figures” (p .15). Baxter Magolda’s study has several implications, but a theme in the results was clear, women followed the receiving pattern and men were more likely to participate in the mastering pattern.

While patterns are valuable, in this research the idea of knowing as it relates to learning is just as important to student development. Baxter Magolda first shared *transitional knowers* as looking for understanding on the level of connecting with others to share ideas to build relationships. While *independent knowers* identified that knowledge is uncertain and unclear at times. Students at this point see the value of their own ideas and want to share them with others. In addition, contextual knowing reveals knowledge is socially constructed and context bound, while containing numerous viewpoints. Baxter Magolda concluded that knowing is ever changing and that no pattern can be identified for each student. More recent work by Baxter Magolda (2001) described the way college graduates become progressively self reliant about how they think and engage with society. To be self-reliant and successful within interdisciplinary education, a student needs to accept that knowledge is unpredictable, with no absolute certainty.

In summary, this chapter provided clear direction on the different developmental stages students go through en route to becoming interdisciplinary learners. In addition, there were some clear differences between males and females in respect to how they process information. Furthermore, the literature presented a recurring theme that development is not concrete, and can occur at any point in time. The chapter further explored the mental processes including links to

cognitive skills and student development. Lastly, the components of possible similarities to self-authorship and transformative learning were reviewed.

## CHAPTER III: METHODOLOGY

As seen in other sections, there is a clear divide in the literature concerning the role and value of interdisciplinary education. Researchers have conflicting findings on the topic based on several variables: socioeconomic background; environment; and/or gender. In addition, questions have been presented to determine if students have the cognitive ability to participate in interdisciplinary education. Historically, college students have actively participated in interdisciplinary learning in some way. Despite the conflicting perspectives in the literature on the value of interdisciplinary education, interdisciplinary programs continue to expand. With the growing enrollment in interdisciplinary programs and growing demand for interdisciplinary thinkers within society, it is valuable to explore how undergraduate students at The University of Alabama perceive their interdisciplinary experience. To obtain a clearer understanding of UA students' perception, a survey was given to a sample of full-time undergraduate students enrolled at The University of Alabama addressing the research questions below.

### **Research Questions**

In an effort to achieve the purpose of this study, the researcher examined the following research questions:

1. In The University of Alabama's New College baccalaureate degree program who participated in this study what are the background characteristics (demographics) of students;
2. What range of topics and disciplines make up the Depth Study areas selected by students in The University of Alabama's New College baccalaureate degree program who participated in this study;

3. What attitudes and beliefs do students in The University of Alabama's New College baccalaureate degree program hold concerning:
  - a. The meaning of an interdisciplinary education,
  - b. The value of an interdisciplinary education,
  - c. Their reasons for choosing to seek a degree in UA's New College,
  - d. The components of the UA New College degree program,
  - e. The value and benefits of completing a degree in UA's New College,
  - f. The skills and knowledge developed through participation in UA's New College,
  - g. The challenges faced in completing a degree in UA's New College,
  - h. The quality of education activities experienced in UA's New College,
  - i. The student's role and responsibility regarding governance and decision-making in UA's New College, and
  - j. The importance of life-long learning; and
4. How do these attitudes and beliefs differ based upon the following gender, race, and class (i.e., freshman, sophomore, junior, senior) of New College students?

### **Survey Population and Sample**

This study explored the enrollment during 2010 at The University of Alabama (UA). According to the UA Factbook, the total 2010 enrollment of the university was 28,807. However, undergraduate full-time, on campus student enrollment was 21,738. This research focused on the enrollment of the College of Arts and Sciences (7,649), specifically the 180 New College students. During the time frame this study was conducted, 180 students participated in the New College program. Participants were recruited from the general New College

undergraduate student population of The University of Alabama who met specific qualifications for this study. A request was sent to the University Registrar office for a list of CrimsonMail email addresses for all students age 19 or older, classified as full-time undergraduate students, currently enrolled in New College in the spring semester 2010. These parameters returned a total of 180 potential participants. Ninety-seven students completed the survey, yielding a response rate of 54%. However, 180 participants only represents roughly 1% of the total UA full-time undergraduate students (21,738) and 2% of the College of Arts and Sciences (7,649) on-campus population.

### **Research Location**

New College is an interdisciplinary program that is based on the idea of practical application rather than abstract theory. Specifically, the New College program is based on the idea of an individualized curricular experience (Berte,1972). Conversely, programs such as those found at Duke University and Arizona State University focus on the combining of multiple majors. These institutions, like many others, generally forfeit student development for the idea of merging majors.

New College, however, focuses on seven major areas such as: enrolling students into the program who are motivated not just elite; focusing on advising that deals with the whole student not just his/her academics; having a plan of action for educational goals; implementing problem based teaching to general education through interdisciplinary education; encouraging off-campus learning experiences for class credit; utilizing depth study programs as a way to involve independent study opportunities; creating individualized graduation requirements; and evaluations procedures (Berte,1972).

These approaches to interdisciplinary education are rooted in the notion of building

strong relationships with students and then bridging them into a community within the New College program. The individualized relationship aspect of New College can be achieved in many ways, but it seems to be possible due to program selectivity; which, in turn, allows for keeping enrollment at a manageable level for faculty. Currently, admission to the program requires a GPA of 2.0, a written self-statement and an interview. The maximum enrollment is set at 250 students and the selection committee consists of two students and a staff member. Further, classroom size is not more than 20 students. This makes the faculty- to- student ratio much lower than that of the general University of Alabama faculty- student ratio.

While many institutions highlight having an interdisciplinary education program, they are only focused on merging classes together. However, these schools have overlooked the importance of integrating students into the college experience and fostering relationship to help them truly connect to the institution. Conversely, New College is a liberal arts program that provides 250 students the opportunity to have a focused educational experience based on their student development needs.

### **Materials and Data Collection**

To collect data, the study used a survey methodology to gain demographic and descriptive information related to the research questions. The survey was created and administered using the Survey Monkey® online survey tool. The survey instrument contained a total of 38 questions of which there were five demographic questions, five student information questions, and 23 six-point Likert scale questions designed to allow participants to share their perspectives on the impact of their interdisciplinary education. In addition, the use of four open-ended questions was incorporated to gather feedback on the way students see the value of being a

part of being a part of the interdisciplinary program and on improvements of the New College program. A copy of the survey instrument is included as Appendix D.

Using the email addresses supplied by the University Registrar, an invitation email was sent to the 180 subjects with a hyperlink to the online survey tool. After the initial invitation email was sent, two follow-up emails were sent to the individuals that had not yet responded to the survey. At that point a final email reminder was sent in an attempt to collect responses from the remaining population. Copies of the initial email invitation and subsequent follow-up emails are included as Appendix C.

### **Data Analysis**

Once the data collection period had ended, the researcher utilized the data analysis tools on the Survey Monkey® website for a baseline review of the data, and exported the survey response data from Survey Monkey® to an Excel spreadsheet file for further analysis. Using the tools available in Survey Monkey® and Excel, the researcher created cross-tabulations and conducted a descriptive and comparative analysis of the data in order to answer the research questions within this study.

### **Researcher Positionality**

Over the last seven years, this researcher has been a part of the The University of Alabama in varying capacities. As a student in the New College interdisciplinary studies program she obtained a Bachelor of Arts in Multi-cultural Programming and Student Development. For clarification, the researcher was not enrolled in the New College interdisciplinary program at the time of this study. The researcher is currently a student in the Higher Education Administration program at The University of Alabama.

Additionally, for the past three years, the researcher has been employed by The

University of Alabama as the Director of University Programs. During the time of this study the researcher was a paid employee of The University of Alabama. Due to her exposure to interdisciplinary education, the researcher decided to conduct a study based on a subject matter which she is both passionate about, and has daily first hand experiences.

A foreseeable limitation was some participants were told that the researcher was a former New College student, potentially leading respondents to give more favorable answers. Also, being an employee of the University of Alabama is public information and a participant could have discovered that information on any University of Alabama website. However, during the time the research was conducted the researcher did not foresee any potential bias while completing this research.

CHAPTER IV:  
SURVEY RESULTS, DATA ANALYSIS, AND FINDINGS

This chapter will present the results, analysis, and findings, of the study. The results from the survey data were analyzed and are detailed within this section. The participant sample was compared to The University of Alabama undergraduate population to determine the representativeness of the sample population. In addition, the demographic characteristics of the survey participants were reviewed. Furthermore, the participants' disciplines were analyzed to review student motivation for participating in the New College program. Finally, the attitudes and beliefs of participants are discussed in terms of interdisciplinary education.

**Response Rate and Representativeness of Sample**

The researcher obtained a report of the CrimsonMail email addresses for a population of students who were 19 years of age and older, classified as full-time undergraduate students for the fall 2009 semester, and enrolled during the spring 2010 semester within the New College program. Although the total undergraduate enrollment count for fall 2009 was 21,738, these parameters returned a total count of potential 7,649 participants. A random selection of 180 participants representing 2% of the total Arts and Sciences, full-time, undergraduate, on-campus population was utilized for the survey participant population. The participant recruitment resulted in 150 beginning the survey, 100 accepting and agreeing to the informed consent statement, and 97 participants completing the survey. Based on the 180 emailed, the response rate was 83% with an acceptance rate of 56% and a completion rate of 54%.

Participants were randomly selected from a report of all eligible students. This section outlines the survey participants as compared to the general undergraduate population at The

University of Alabama (UA). As shown in Table 1, the demographics of the survey participants were representative of the UA undergraduate population based on the numbers enrolled in New College. The lower count for the 18- and 19-year-old range was most likely an artifact of the participant age cut off of 19 years of age and older. Additionally, ages 20 and 21 in New College show a difference of approximately 0.5%, which may be attributed to 25 and older representing 9.5% of the study. Interestingly, 25 and older only make up 4.0% of the general UA undergraduate student body. When comparing the participants to the UA undergraduate population in terms of gender, while the gap for New College appears wider, the majority is still female with 67% of New College Students being female, as opposed to 52.4% of the general UA undergrad population. Classification of the survey participants also shows a large difference in the *freshman* category. Again, this is likely a result of the minimum participation age being set at 19. There are notable differences in the *sophomore* (+7.66%) and *senior* (+ 9.73%) classifications, with only a minor difference in the *junior* classification (-.62%). Differences appear in the racial comparisons as well with the highest difference in the *other minority* category. This is likely due to the multiple racial categories from the survey respondents being merged into *other minority*. Additionally, 21% of the New College reported being *African American*, as opposed to 11.8% of the UA undergraduate population. Those in New College classifying themselves as *White* was 70%, in comparison to 82.9% of the overall undergraduate body. Overall, the participants of this study seem to be a fair representation of the overall University of Alabama undergraduate population based on the New College program.

### **Demographic Characteristics of Participants**

The vast majority of participants in this study were students 20 to 21 years of age, making up 39% of the study. The majority of the participants in this study are off campus

students 57.83%; however, during the 2010 timeframe, the University did not require freshmen to live on-campus. In addition, the response rate for students 25 years and older was higher than the university enrollment average. Nevertheless, this might be due to the fact that Non-Traditional students often major in New College because it allows them to specialize in certain areas outside of the university and apply work experience to class credit. Furthermore, New College has evening classes that better accommodate working students. Additionally, at 67.3%, the majority of the participants are female and 33% are male which reflects the University enrollment rates. Race and ethnicity categories showed the survey participants are predominately White (non-Hispanic) at 70% and this was representative of The University of Alabama underlying population.

The grade point average (GPA) of participants has been used to look at the possible differences between students participating in an interdisciplinary studies program (see Table 2). The majority of the students who took part in this study were seniors 33.73%, with an average (GPA) of 3.73. However, female students averaged a 3.8 (GPA), slightly higher than the normal University of Alabama average of 3.4. This change might be due to the differing educational requirements of New College students. As shown in Table 2, students identified as white have a 3.86 GPA, which is only negligibly lower than the University average of 3.9. African American students however average 2.9 (GPA) in comparison to the University normal average of 2.8. New College is obviously a decidedly smaller program with 180 students in comparison to 21,738 University of Alabama undergraduate students. This only accounts for 1% of population.

Table 1

*Demographic Characteristics of Survey Participants with The University of Alabama**Undergraduate Population (Questions 1-6)*

	Participants	UA Full-Time Undergraduates
<b>Age</b>		
18 and 19	31.3%	41.8%
20 and 21	39.0%	38.5%
22 to 24	18.0 %	14.9%
25 and older	9.5%	4.0%
<b>Gender</b>		
Female	67.00%	52.40%
Male	33.00%	47.60%
<b>Classification</b>		
Freshmen	18.70%	32.00%
Sophomore	27.71%	20.50%
Junior	20.48%	21.10%
Senior	33.73%	24.00%
Unclassified	-	2.30%
<b>Race</b>		
White	70.00%	82.90%
African American	21.00%	11.80%
Other Minority	15.00%	3.90%
<b>Housing</b>		
On-campus	42.17%	47.00%
Off campus	57.83%	53.00%

Data Source: The University of Alabama 2009-2010 Factbook

Note. The minimum age for survey participants was 19, however the UA Factbook combines ages 18 and 19 in their reporting. Note. Participants who responded as Asian American/Pacific Islander, Hispanic or Latino/a, Native American or Alaskan Native, and Other are included in the Other Minority category.

Table 2

*Mean GPA of Survey Study Participants and University of Alabama Full-Time Undergraduates (Question 7)*

Grade Point Average	Participants	UA Full-Time
Male	2.5	2.6
Female	3.8	3.4
Freshmen	2.7	2.0
Sophomore	2.71	2.5
Junior	3.48	2.9
Senior	3.73	3.0
White	3.86	3.9
African American	2.9	2.8
Other Minority	--	--

Data Source: The University of Alabama 2009-2010 Factbook.

### Overview of Results

The depth study majors among students varied (see Table 3), differing in many ways. When correlating the themes within depth studies, *music* is a recurring major theme, appearing 11 times at 14.86% of total responses, while *global studies* is not far behind at 13.51% of total responses. *Design, anthropology,y* and *photography* combined for 28.38% of the total responses. These numbers seem to be a little high when looking at the makeup of 180 students. However, it is probably due to the majors overlapping in different ways, with students combining majors. For example, one student is focusing on the correlation between music and photography within video games. While there is less of a theme with *film, religion* and *politics*, this might be because fewer students are combining these areas of interest. This is not common when looking at the

traditional majors within the university Factbook. However, university students are only allowed to select an individual major or minor, without the luxury of comingling areas of interest.

Table 3

*Trends in Depth Studies Majors Among New College Students (Question 8)*

Majors	Percent	Numbers of Occurrences
Music	14.86%	11
Global Studies	13.51%	10
Design	9.46%	7
Anthropology	9.46%	7
Photography	9.46%	7
Science	6.76%	5
Video Game Design	4.05%	3
Education	4.05%	3
Linguistics	4.05%	3
Forensic Psychology	2.70%	2
Film	2.70%	2
Humanities	2.70%	2
Religion	2.70%	2
Dance	2.70%	2
Politics	2.70%	2
Social Science	2.70%	2
Total	100.00%	70

Data Source: The University of Alabama 2009-2010 Factbook.

Identified below, 44.59% of participants in this study changed majors, with 74 individuals responding to this question. However, this might be due to students having a large amount of exposure to different experiences in-side and out-side of the class leading them to change programs of study to better suit their needs. With over half (55.41%) of the respondents

indicating they did not change majors, this could be a good indication that students are finding areas of interest and committing to them.

Table 4

*Students Changing Majors Within New College (Question 9)*

Major Change	Percent	Participants
Yes	44.59%	33
No	55.41%	41

Participants seem to put strong value on building relationships as a factor of joining New College. As seen in Table 5, 22.22% of the respondents indicated being *included and wanted* as a factor for participation. While 25, or 34.72% outlined the *small community* environment helped in the decision making process of studying with New College. Oddly, *engaged in my education* demonstrated to be one of the lower trends with 9 respondents, or 12.50% answering in the affirmative. This could potentially be lower because students are encouraged to create their own major. Yet, only 8 (11.1%) responded that being allowed to create their own major was a factor for selecting New College.

Table 5

*Reasons for Selecting New College (Question 11)*

	Percentage	Number of Occurrences
Small community	34.72%	25
Non Traditional majors	25.00%	18
Felt included and wanted	22.22%	16
Out of class experience	22.22%	16
Engaged in my education	12.50%	9
Allowed to create major	11.11%	8

Provided me with knowledge 4.17% 3

Table 6

*The Role Interdisciplinary Education Serves in Learning (Question 12)*

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Lifelong learning	59.70%	28.3%	8.96%	1.49%	1.49%
Problem solving	50.75%	41.79%	5.97%	1.49%	0%
Critical thinking	53.73%	35.8%	10.45%	0%	0%
Connecting theories and applying them	46.27%	43.28%	2.99%	4.48%	2.99%

Participants were asked if certain educational aspects were a part of their interdisciplinary experience. Over 50% (see Table 6) of participants *strongly agreed* that educational aspects from *lifelong learning* to *critical thinking* were part of their educational experience. The majority of respondents in each category, close to 90%, either *strongly agreed* or *agreed* across the board on all aspects of this question. This could be because of the challenge of finding a place of belonging on such a large campus. New College students might see more value in the out-of-class experience.

Table 7

*The Value of Out-of-Class Interdisciplinary Opportunities (Question 12)*

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Service projects	52.24%	20.90%	14.93%	1.49%	0.00%
Independent study projects	52.24%	25.27%	8.96%	0.00%	1.49%

Learn from others	50.75%	28.36%	16.42%	4.48%	0.00%
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In addition, participants believed out-of-class learning was a valuable part of their interdisciplinary experience (see Table 7). Over 70% of students *strongly agreed* or *agreed* out-of-class experience was just as important for them. Less than 2% responded that out-of-class opportunities were not important.

Table 8

*The Role of Student Development among New College Students within Higher Education*  
(Question 12)

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Ownership and accountability of education	68.66%	25.3%	4.48%	1.49%	0.00%
Break down academic barriers	40.30 %	34.3%	14.93%	8.96%	1.49%
Decision making process	40.30%	43.28%	8.96%	2.99%	4.48%
Valuing of education	43.28%	23.88%	28.36%	2.99%	1.49%

Furthermore, 68.66 % of participants (Table 8) saw *Ownership and accountability* as a part of their development. In addition, 40.30 % reported *Breaking down academic barriers* as a part of student development while approximately 4.5% *Strongly Disagreed/Disagreed* that this was relevant to their development as a student.

Table 9

*Value of Relationship with Faculty within an Interdisciplinary Environment (Question 12)*

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Individual faculty advising helpful	61.19%	20.9%	14.93%	2.99%	0.00%
Faculty outings with students building community	41.79%	43.2%	10.45%	1.49%	2.99%

Table 10

*Perceptions of the Meaning of Interdisciplinary Studies (Question 14)*

	Percentage	Number of Occurrences
Combination of different disciplines	35.08%	20
Building relationships within all areas of a college experience	21.05%	12
Foster community	22.81%	13
Challenging students to critically thinking	22.81%	13
Going beyond regurgitating information	17.54%	10
Learning without borders	3.51%	2
Teaching how to problem solve in any situation	5.26%	3
Passionate about learning for life	15.79%	9
Take ownership of the educational process	3.51%	2
Identify education on a global scale	3.51%	2

Building great citizens	3.51%	2
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The role and value of faculty are key areas in most departments within higher education. As evidenced in Table 9, New College is no different with over 81% of participants *strongly agreeing/agreeing* faculty are important to the program. In addition, faculty involvement outside of the classroom resulted in over 84% of students *strongly agreed/agreed* they value the experience with faculty. While, only 2.99 % *strongly disagreed*, which is less than 4% of the overall responses for this question.

Participants had several perspectives on the meaning of interdisciplinary education (see Table 10). One recurring theme (35.08%) was the *combination of different disciplines*. This response showed up over 20 times. In addition, 12 (21.05%) of the students sampled identified *building relationships* as important. Furthermore, the idea of community is highlighted again among the respondents. Also, 22.81% of the group identified *fostering community* as an important part of interdisciplinary meaning.

Table 11

*Benefit of Being in an Interdisciplinary Program (Question 15)*

	Percentage	Number of Occurrences
Out of classroom experience	35.9%	20
Student driven	21.05%	12
Focus on education	17.54%	10
Involvement with faculty	17.54%	10
Community	8.77%	5
Providing independence	3.51%	2
Sharing of ideas	7.02%	4

Ability to create major	7.02%	4
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Table 12

*Challenge of Being a Part of Interdisciplinary Program (Question 16)*

	Percentage	Number of Occurrences
Translating experience into work force	22.22%	12
Selecting a depth study	12.96%	7
Mapping out a clear study plan	16.76%	9
Limited diversity to learn from	12.96%	7

Table 13

*Themes for Areas of Improvement within New College (Question 17)*

	Percentage	Number of Occurrences
Online interaction for those who work	17.78%	8
Living learning communities	33.33%	15
Interview process should be longer	11.11%	3
Requirements for participating in New College should be clearer	4.44%	2
Independent study should be required before senior year	6.67%	3
The third year review should be pushed more	8.89%	4
Senior projects should be senior year and go through many drafts	6.67%	3
Paring practicum and seminars together	6.67%	3
Create job placement programs for New College students	8.89%	4
More diverse faculty and students	6.67%	3

*Translating experience into the workforce* (see Table 12) was an apparent area of concern among participants. Twelve respondents (22.22%) presented this as being challenging within the interdisciplinary program. While *selecting a depth study* and *mapping a clear study plan* to execute the depth study are issues for about 30% of the students in the program.

There seemed to be a recurring theme that students want to stay connected to New College. Over 50% of responses in Table 13 were based on suggestions to have more access to the

program. While less than 20% are operational recommendations to improve the process of being a part of New College.

CHAPTER IV:  
CONCLUSIONS AND RECOMMENDATIONS

**Introduction**

The purpose of this study was to examine full-time undergraduate students enrolled in The University of Alabama's (UA) New College interdisciplinary studies program. Of particular interest was how students viewed the role and value of interdisciplinary studies within their personal and academic development. The results from the survey data have been analyzed in detail. Furthermore, the participant sample was compared to The University of Alabama undergraduate population to determine the representativeness of the sample population. In addition, the demographic characteristics of the survey participants have been reviewed. Furthermore, the participants' disciplines were analyzed to discuss motivations for participating in the New College program. Finally, the attitudes and beliefs of participants are discussed in terms of interdisciplinary education.

Participants were selected randomly from a report of all eligible students' CrimsonMail email addresses for a population of students who were 19 years of age and older, classified as full-time undergraduate students for the fall 2009 semester and enrolled during the spring 2010 semester within the New College program. Although the total undergraduate enrollment for fall 2009 -2010 was 21,738, these parameters returned a total of 7,649 potential participants. A random selection of 180 participants representing 2% of the total College of Arts and Sciences, full-time, undergraduate, on-campus population was utilized for the survey participant population. The participant recruitment resulted in 150 beginning the survey, 100 accepting and agreeing to the informed consent statement, and 97 participants completing the survey. Based on the 180 emailed, the response rate was 83% with an acceptance rate of 56%

and a completion rate of 54%. The New College program reflects 1% of the overall enrollment at UA, and the response rate was not ideal from a research perspective. However, gaining over 50% participation within the New College program was helpful. Unavoidably, some participants selected to answer some questions over others, resulting in varying response rates within the survey itself.

### **Conclusions from Research Questions**

The purpose of this study was to gain an understanding of student perspectives on the role and value of an interdisciplinary education, more specifically, perceptions of currently enrolled New College students at The University of Alabama. Primarily, the study focused on looking at how college students viewed their interdisciplinary education in areas of academic involvement, non-academic opportunities, student development, and engagement with faculty. Results are reviewed in detailed within the Conclusions and Recommendations sections.

#### **Research Question One**

What are the background characteristics/demographics of students in the New College baccalaureate degree program at The University of Alabama? A wide variety of students participated in the New College interdisciplinary studies program. Ten percent of the participants were freshmen males with 40% of the male respondents identifying as seniors. The percentage of seniors as compared to freshmen might be due to the New College admission requirement of an identified a depth study area of concentration. This potentially might not be the best fit for freshmen in general because they are not truly committed to a major at this early stage. In addition, 80% of the participants were Caucasian males with only 10% African American or Hispanic. While the survey had no representation of Asian males or American Indian males, the

sample closely mirrored the enrollment of the University. Furthermore, 40% of the Hispanic and African American male students were on campus residents, while 60% of the Caucasian males lived off campus. The majority of the participants in this study are off campus students 57.83%. As the university allows upper classmen to move off campus results seemed to be reflective of the true campus community.

The vast majority of participants in this study were students 20 to 21 years of age, making up 39% of the study. In addition, the response rate for students 25 years and older is higher than the university enrollment average. However, this might be because non-traditional students often major in New College because it allows them to specialize in certain areas outside of the standard university curriculum and receive class credit for work experience to class credit.

The majority of the students taking part in this study were seniors (33.73%) with an average GPA of 3.73. This average was higher than the 3.0 GPA recorded by the seniors in the general full-time undergraduate student population. Female students averaged a 3.8 GPA, higher than the normal UA average for females of 3.4. Also, New College GPAs were higher than UA average. This change could be attributable to the differing educational requirements of New College students.

Students identified as *white* had a 3.86 grade point average, only slightly lower than the University average of 3.9. African American students averaged a 2.9 GPA, which is a little higher in comparison to the University normal average of 2.8. New College is a smaller program with 180 students in comparison to 21,738 UA students, only making up 1%, which might account for differing (GPA) rates.

## Research Question Two

What range of topics and disciplines make up the Depth Study areas selected by students in The University of Alabama's New College baccalaureate degree programs? Corresponding to survey item 8, “What Depth Study or general interest did you indicate in your essay for admission to New College,” this research question sought to determine the major themes within the choice of Depth Studies. The majority of respondents, 14.86%, stated that *music* was their major of choice. This was closely followed by *global studies*, with 13.51%. Further, 14% of white males majored in *sustainability* and another 20 % *global studies* while 10% of white females took another direction and majored in *business* and *creative writing*. When completing a comparison of majors selected among Caucasian males and Caucasian females, there was no clearly identified difference.

## Research Question Three

What attitudes and beliefs do students in The University of Alabama's New College baccalaureate degree program hold concerning the following:

- a. The meaning of an interdisciplinary education,
- b. The value of an interdisciplinary education,
- c. Their reasons for choosing to seek a degree in UA’s New College,
- d. The components of the UA New College degree program,
- e. The value and benefits of completing a degree in UA’s New College,
- f. The skills and knowledge developed through participation in UA’s New College,
- g. The challenges faced in completing a degree in UA’s New College,
- h. The quality of education activities experienced in UA’s New College,

- i. The student's role and responsibility regarding governance and decision-making in UA's New College, and
- j. The importance of life-long learning.

Interdisciplinary education has a myriad of meanings depending on where one looks or who one asks. Students' answers were as varied as the researchers' theories. However, one binding thread seemed woven throughout: connection. Whether it be connection to faculty, connection to a diverse population of students, or to a personally designed curriculum, the act of being connected is key. New College students sampled recognized the need for these connections from personal support systems to career networking opportunities.

Over a third (34.72%) of respondents (see Table 5) identified the sense of community as an important factor in their New College education. Additionally, 88% respondents either *strongly agreed* or *agreed* that their interdisciplinary experience gave them the desire to continue engaging in learning as a lifelong practice (see Table 6).

The ability to troubleshoot, problem solve, and perform complex tasks beyond just rote and procedural memory type behaviors is critical. Interdisciplinary education within higher education has documented value in the area student development and higher order thinking. The participants of this study vary on the meaning of interdisciplinary education; however, cognitive advancement mainly focusing on problem solving beyond a single discipline is a clear recurring theme (Boix Mansilla, Miller, & Garder, 2000). Ninety-two percent of the responding participants either *strongly agreed* or *agreed* that their participation in interdisciplinary studies helped developed their problem solving skills. Further, 89% believed that their critical thinking skills were enhanced by their New College experience. The idea of an interdisciplinary education

providing skills for such higher order thinking was a deciding factor for some to participate in New College.

Over 60% of students surveyed reported that out of class experience was as important as in-class experiences for them. Seventy-three percent stated the ability to be a part of service projects was a valuable part of their experience (see Table 7). Seventy-eight percent believed independent study projects were important, while 79% indicated that learning from others added value to their educational experience.

Challenges faced with in the interdisciplinary education program were different depending on the student demographic. For example, male participants struggled with finding meaning in seminars linked to the individual career goals while female participants seemed to have more challenges in finding value within the program that support their personal development. Fifteen percent of the freshmen highlighted that not knowing how much ownership they have in their education was a clear concern for them. In addition, only the freshmen students mentioned the need for clear expectations on what it means to be an interdisciplinary student within New College. This might be because they are new to the idea of interdisciplinary education and face the uncertainty of how to navigate such a flexible program. Moreover, 60% of seniors pointed out that explaining and justifying an interdisciplinary education beyond the institution of higher education was a concern.

Securing gainful employment was reported as a concern for the participants. Over 20% of respondents presented this being challenging within the interdisciplinary program. In addition to providing recommendations for improvements within the new college 30% of Caucasian males want to focus on career development. While 15% of minority males addressed the need for faculty support beyond the classroom. Female participants point out the need to draw

connections with other programs within the University of Alabama. Additionally, selecting a depth study and finding a clear path to execute the depth study were challenges for 30% of the students in the program.

Participants revealed they have an active role in the New College interdisciplinary experience. Students stated they have the opportunity to participate in the creation and implementation of student committees that participate in new student selection. Twenty percent of participants noted the benefit of being a member of the New College governance group. Additionally, 10% of students directly correlated learning beyond college with their opportunities with governance and out-of-class opportunities.

#### **Research Question Four**

How do these attitudes and beliefs differ based upon select demographic the following characteristics of New College students [gender, race and or class (i.e., freshman, sophomore, junior, senior)]. When looking at the data, each group of students from across all demographic categories had different perspectives concerning interdisciplinary education. However, there was a recurring thread that all students within New College see the value of the opportunity to be a part of this innovative program. Male students seemed to see career opportunities afforded by a diverse educational background. On the other hand females, especially the minority females, were more drawn to the close knit support system provided. Only 10% of responding males agreed that the small, intimate seminars helped to build a strong sense of community, nor did these seminars add any value to their education. Additionally, males reported having a more difficult time connecting the theories that span across the varying disciplines. Conversely, 100% of male respondents reported the out-of-class experiences with business and community was more valuable than independent study projects with faculty.

There are some interesting differences in the responses based on age. The 19-year-old participants seem to be vague in their understanding of interdisciplinary education. However, the 21-year-olds have a more in-depth understanding of what it means to be a part of the program. This clear divide in answers could be correlated to the 19-year-old lack of experience in the program and lacking a full appreciation of New College. Further, 15% of the freshmen male respondents reported entering New College for its flexibility in programmatic choices, while the seniors reported supporting the idea of campus community was valuable.

As students grow academically, there seems to be a clear change in the role and value New College plays for them. Over 20% of seniors highlighted that being empowered was more valuable than 15% of freshmen who were more concerned with having clear career paths. Even the path to enrollment differs, with 15% of students who joined New College have done so because a friend or family member told them about it, while over 20% of juniors and seniors admitted they were searching for a experience that would challenge them academically and personally, Furthermore, from freshmen year to junior year, 70% of students changed their depth studies, but by their senior year only 40% changed their major. Programmatic changes between freshman to sophomore year were drastic. However, in comparison, changes from junior to senior year were not as prevalent.

The data showed 10% of the freshmen students saw the value of being in a interdisciplinary education of having mutual skill sets, while 40% of seniors focused more on the ability to apply the knowledge gained in the classroom. The application of knowledge was a reoccurring theme among most upper classmen within the New College program. Perhaps this attributed to upperclassmen are in the process of transiting into the work force. Freshmen responses only seemed to be concerned with the current benefit of the education, while seniors

were looking more to the future by focusing lifelong learning beyond The University of Alabama. Regardless of the differences, one main overarching theme remained constant; all students within New College recognized the value added by their educational experience.

### **Recommendations**

A myriad of researchers have done work related to interdisciplinary education. In reviewing the literature, there is no clear consensus among the authors concerning the role or value of this type of education. In fact, in most cases there are mixed reviews on the meaning, role and value. However, there is a clear value with the responses from The University of Alabama New College students participating in the interdisciplinary program. This value seems to be prevalent the student enrolled in the program, but for people outside of the program it might not be as evident. Several participants pointed out the misconception of the New College program being a place for students “who want to make up a major.” This type of in misinformation led this researcher to suggest New College review the perception of the program outside of the College of Arts and Sciences. Furthermore, the research clearly indicates that a lack of diversity among faculty, staff and students is a concern for students within the program. The data revealed students emphasized the significance of the diversity of people they studied in the classroom. However, the program itself is not that diverse in terms or race. A strategic review of the marketing, advertising and hiring strategies of the program could serve to increase the diversity of the program. In addition, conducting focus groups with students who do not participate in New College should help to provide administration a clearer picture of why other minorities groups do not participate in the New College program.

The survey data revealed their working students enrolled in New College feel excluded if they are not able to participate in activities outside of the classroom. The data further presented

the possible solution as online interaction beyond class assignments. This solution would be an additional way to provide opportunities for students who want to work with New College. The live feed option on the New College website could be a viable option for students to stay actively involved. In addition, The University of Alabama Second Life account would allow New College to create programs for students to participate in both regionally and nationally.

The survey instrument for this study provided a basic understanding of students' perceptions of interdisciplinary education. Modifying the instrument and the overall study design are strong recommendations for future research. The on-line survey was designed with skip logic, which is designed to move participants along based on responses to previous questions. The skip logic unfortunately did not work properly, and individuals who should have exited the survey at some point remained in the survey. This issue presented a problem that required manual correlation of data.

A further recommendation is to alter some of the demographic survey questions to limit interpretation from participants. Question six, for example, should have expanded to include which locations on or off-campus students live. By developing this question more, the researcher would have data to correlate which locations have more interdisciplinary students. Furthermore, this would have been helpful when providing recommendations on types of on or off-campus programs. Questions to include when majors were changed would have helped provide a clear picture of at which stage are students more likely to change major. Additionally, a question should be included for in-state or out-of-state students. This question would further allow researchers to identify which groups have a better understanding of interdisciplinary education. This question could have implications in understanding the type of correlations between high school versus college introduction of interdisciplinary education.

Additionally, qualitative analysis for question 12, letters A to U should be implemented to derive a more in-depth analysis of the responses to each subsection. Respondent's answers led the researcher to identify these questions needed a more in-depth treatment to fully flesh out any trends or relevant themes. For example, students were asked about understanding the numerous theories within interdisciplinary education. A deeper analysis is needed to get a clearer picture of the students' level of understanding. Questions about depth studies could have been more specific as well. In addition, question ten concerning the depth study major could have presented categories for students to select their choices. This approach to collecting the data would have provided the researcher the information to cross tabulate the depth studies.

Furthermore, within the literature there was a great deal of information on the role faculty have in the development of an interdisciplinary student. In fact, some literature outlines that faculty members are indeed contributors to development, while in other literature researchers stated that faculty were not relevant to this process (Gaff, 1971). Many authors have written about faculty being more concerned about tenure and receiving promotions over connecting with students outside of the classroom setting. Survey questions to gain insight on how faculty see their role within the college should also be included. These questions could provide a more complete view of New College pertaining to the faculty role in and perceptions regarding student development.

Finally, several colleges and universities have identified having an interdisciplinary major or approach to learning. A comparison study between The University of Alabama's New College program and schools in the South Eastern Conference (SEC) interdisciplinary programs could be prove to be beneficial to the body of literature. This type of research would help identify trends within teaching methods, curriculum design, program design, student

participation, and graduation rates. In addition, this study could help highlight overall similarities and differences across interdisciplinary programs. Information such as this could allow potential students to review all similar programs in the SEC at one time. Comparative work would also be a positive addition to the over all interdisciplinary studies body of literature. Currently, the most recent comparative research is at least 10 years old, thus making it difficult to find work that speaks to the changing higher education climate. Further, this research should help create a stronger dialog among colleges that have similar missions and aid each school in providing the best interdisciplinary experience to college students.

### **Summary**

The University of Alabama's New College program, based on survey data, has provided a space for students to have interdisciplinary educational experiences. According to the data, New College students value of out-of-class opportunities to connect with faculty and other students. However, they feel the New College program should look at ways to help students with career opportunities beyond The University of Alabama. Based on the data, over half of the New College students identify a positive experience with the New College. Results show survey participants felt they are gaining an interdisciplinary experience in several ways, from faculty interaction to depth study majors.

## REFERENCES

- Armstrong, F. H. (1998). Faculty development through interdisciplinarity. In W. H. Newell (Ed.), *Interdisciplinarity: Essays from the literature*. (pp. 171-180). New York: The College Board.
- Astin, A. W. (1993). *What matters in college? Four critical years revisited*. San Francisco: Jossey-Bass.
- Arum, R., & J. Roska.(2011). *Academically Adrift: Limited Learning on College Campuses*. Chicago: University of Chicago Press.
- Baxter Magolda, M. B. (1992). *Knowing and reasoning in college: Gender related patterns in students' intellectual development*. San Francisco: Jossey-Bass.
- Benson, C. (1982). Project BASIC: Building art systems into curriculum. *Art Education*, vol 12 (number), 40-42.
- Berte, R. N. (1972, January). *Innovations in undergraduate education: Selected institutional profiles and thoughts about experimentalism*. Report of a conference on Innovations in Undergraduate Education, The University of Alabama, Tuscaloosa.
- Bonwell, C. C., & Eison, J. A. (1991). *Active learning: Creating excitement in the classroom* (ASHE-ERIC Higher Education Report, No. 1). Washington, DC: The George Washington University, School of Education and Human Development.
- Boyer, E. L., & Carnegie Foundation for the Advancement of Teaching. (1987). *College: The undergraduate experience in America*. New York: Harper & Row.
- Bok, D. (2006). *Our underachieving colleges: A candid look at how much students learn and why they should be learning more*. Princeton, NJ: Princeton University Press.
- Boix Mansilla, V., Miller William, C., & Gardner, H. (2000). On disciplinary lenses and interdisciplinary . In S. Wineburg & P. Grossman (Eds.), *Interdisciplinary curriculum - challenges to implementation*. (pp. 17-38). New York: Teachers College Press.
- Baxter Magolda, M. B. (2001). *Making their own way: Narratives for transforming higher education to promote self-development*. Sterling, VA: Stylus.
- Baxter Magolda, M. B. (1992). *Knowing and reasoning in college: Gender related patterns in students' intellectual development*. San Francisco: Jossey-Bass.
- Baxter Magolda, M. B. (1986). The affective dimension of learning: Faculty-student relationships that enhance intellectual development. *College Student Journal*, 21, 46-58.

- Barr, R. B., & Tagg, J. (1995). From teaching to learning—A new paradigm for undergraduate education. *Change*, 27(6), 12–25.
- Baxter Magolda, M. B., & King, P. M. (Eds.). (2004). *Learning partnerships: Theory and models of practice to educate for self-authorship*. Sterling, VA: Stylus.
- Cooper, J. L., Robinson, P., & McKinney, M. (1994). Cooperative learning in the classroom. In D. F. Halpern (Ed.), *Changing college classrooms: New teaching and learning strategies for an increasingly complex world* (pp. 74-92). San Francisco: Jossey-Bass.
- Clark, B. R. (1987). *The Academic Life: Small worlds, different worlds*. Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching
- Cobb, P. (1994). Where is the mind? Constructivist and sociocultural perspectives on mathematical development. *Educational Researcher*, 23(7), 13-20.
- Dressel, P. L. (1958). The meaning and significance of integration. In N. B. Henry (Ed.), *The integration of educational experiences: The fifty-seventh yearbook of the National Society for the Study of Education* (pp. 3-25). Chicago: The University of Chicago Press.
- Dewey, J. (1956). *The school and society: The child and the curriculum*. Chicago: The University of Chicago Press.
- Fink, L. D. (2003). *Creating significant learning experiences*. San Francisco: Jossey-Bass.
- Frodeman, R., Klein, J. & Mitcham, C. (2010) *The Oxford handbook of interdisciplinary*. In J. Holbrook (Eds.) University of North Texas Oxford University Press.
- Gabelnick, F., MacGregor, J., Matthews, R. S., & Smith, B. L. (1990). Learning communities: Creating connections among students, faculty, and disciplines. *New Directions for Teaching and Learning*, 41. San Francisco: Jossey-Bass.
- Gaff, J. G., & Wilson, R. C. (1971). *Faculty cultures and interdisciplinary studies*. *The Journal of Higher Education*, 42 186-201.
- Hake, R. R. (1998). *Interactive-engagement vs traditional methods: A six-thousand student survey of mechanics test data for introductory physics courses* (No. ED 441 679). Bloomington, IN: Indiana University.
- Haynes, C. (Ed.). (2002b). *Innovations in interdisciplinary teaching*. Westport, CT: American Council on Education/Oryx Press.

- Haynes, C. (2002a). Introduction: Laying a foundation for interdisciplinary teaching. In C. Haynes (Ed.), *Innovations in interdisciplinary teaching* (pp. xi-xxii). Westport, CT: American Council on Education/Oryx.
- Hugh, H. (1992). *Banding together: The rise of national Associations in American higher education, 1887-1950*. Baltimore, MD: Johns Hopkins University Press.
- Hursh, B., Haas, P., & Moore, M. (1998). An interdisciplinary model to implement general education. In W. H. Newell (Ed.), *Interdisciplinarity: Essays from the literature* (pp. 35-49). New York: The College Board.
- Halpern, D. F. (Ed.). (1994). *Changing college classrooms: New teaching and learning strategies for an increasingly complex world*. San Francisco: Jossey-Bass.
- Jones, S. R., & Abes, E. S. (2001). Enduring influences of service-learning on college students' identity development. *Journal of College Student Development*, 42, 204-216.
- Klein, J. T. & Newell, W. (1996). Interdisciplinary studies. Handbook on the Undergraduate Curriculum. San Francisco: Jossey-Bass. (pp. 393-415).
- Kliwer, J. R. (1999). *The innovative campus: Nurturing the distinctive learning environment*. Oryx Press, 308.
- Kerr, C. (2001) The Idea of a multiversity. In C. Kerr (Ed.), *The uses of the university* (5th ed., pp.1-36). Cambridge, MA: Harvard University Press.
- Kegan, R. (1994). *In over our heads*. Cambridge, MA: Harvard University Press.
- Kezar, A., & Rhoads, R. A. (2001). The dynamic tensions of service learning in higher education: A philosophical perspective. *Journal of Higher Education*, 72, 148-171.
- Klein, J. (1990) *Interdisciplinarity history, theory and practice*. Detroit: Wayne State University Press.
- Knefelkamp, L., & Schneider, C. (1997). Education for a world lived in common with others. In R. Orrill (Ed.), *Education and democracy: Re-imagining liberal learning in America* (pp. 327-344). New York: The College Board.
- Knefelkamp, L. L. (1984). *A workbook for the practice-to-theory-to-practice model*. Unpublished manuscript, University of Maryland, College Park.
- Kockelmans, J. J. (1998). Why interdisciplinarity? In W. H. Newell (Ed.), *Interdisciplinarity: Essays from the literature* (pp. 67-96). New York: The College Board.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.

- Kolb, D. A., Boyatzis, R. E., & Mainemelis, C. (2001). Experiential learning theory: Previous research and new directions. In R. J. Sternberg & L. Zhang (Eds.), *Perspectives on thinking, learning, and cognitive styles* (pp. 227-247). Mahwah, NJ: Erlbaum.
- Kuh, G. D. (1996). Guiding principles for creating seamless learning environments for undergraduates. *Journal of College Student Development, 37*, 135-148.
- Mertens, D. M. (2005). *Research and evaluation in education and psychology: Integrating diversity with qualitative and mixed methods*. New Haven, CT: Sage.
- Miller, M., & Boix Mansilla, V. (2004). *Thinking across perspectives and disciplines* [Electronic version]. Cambridge, MA: Harvard University, Project Zero.
- Newell & Klein, (1996). Interdisciplinary studies into the 21st century. *Journal of Education, 45*(1), 153-156.
- Newell, W. (1984) *Against the current: reform and experimentation in higher education*. (ed) Jones, R & Smith, B. Cambridge, MA: Schenkman Publishing.
- Pascarella, E. T., Edison, M., Whitt, E. J., Nora, A., Hagedorn, L. S., & Terenzini, P. (1996). *Cognitive effects of Greek affiliation during the first year of college*.
- Pintrich, P., & Schunk, D. (1996). *Motivation in education: Theory, research, and applications*. Englewood Cliffs, NJ: Merrill.
- Perry, W. G., Jr. (1970). *Forms of intellectual and ethical development in the college years: A scheme*. New York: Holt, Rinehart and Winston.
- Perry, W. G., Jr. (1981). Cognitive and ethical growth: The making of meaning. In A. W. Chickering & Associates (Eds.), *The modern American college* (pp. 76-116). San Francisco: Jossey-Bass.
- Phillips, D. C. (1995). The good, the bad, and the ugly: The many faces of constructivism. *Educational Researcher, 24*(7), 5-12.
- Piaget, J. (1963). *The origins of intelligence in children* (M. Cook, Trans.). New York: Norton.
- Piaget, J. (1968). *Six psychological studies* (A. Tenzer, Trans.). New York: Random House.
- Repko, A. F. (Ed.). (2008). *Interdisciplinary research: Process and theory*. New Haven, CT: Sage.
- Rhoten, D., Boix Mansilla, V., Chun, M., & Klein, J.T. (2006). *Interdisciplinary education at liberal arts institutions*. Retrieved August 14th, 2011, from <http://www.teaglefoundation.org/search/default.aspx/searchterm=Rhoten2006>

- Rudolph, F., & Thelin, J. R. (1990). *The American college and university: A history*. Athens, GA: University of Georgia Press
- Seabury, M. B. (Ed.). (1999c). *Interdisciplinary general education: Questioning outside the lines*. New York: The College Board.
- Stehr & Weingart (2000). *Practising interdisciplinarity*. Toronto: The University of Toronto Press.
- Sternberg, R. J. (2008). *Interdisciplinary problem-based learning: An alternative to traditional major and minors*. Washington, DC: Association of American Colleges and Universities.
- Stember, M. (1998). Advancing the social sciences through the interdisciplinary enterprise. In W. H. Newell (Ed.), *Interdisciplinarity: Essays from the literature* (pp. 337-350). New York: The College Board.
- Taylor Huber, M., & Hutchings, P. (2004). *Integrative learning: Mapping the terrain*. Washington, DC: Association of American Colleges and Universities & The Carnegie Foundation for the Advancement of Teaching.
- Thompson Klein, J. (2005a). *Humanities, culture and interdisciplinary: The changing American academy*. Albany: State University of New York Press.
- Thompson Klein, J., & Newell, W. H. (1997). Advancing interdisciplinary studies. In J. Gaff & J. Ratcliff (Eds.), *Handbook of the undergraduate curriculum: A comprehensive guide to purposes, structures, practices, and change* (pp. 393- 415). San Francisco: Jossey-Bass.
- Vygotsky, L. S. (1978). Interaction between learning and development (M. Lopez-Morillas, Trans). In M. Cole, V. John-Steiner, S. Scribner, & E. Souberman (Eds.), *Mind in society* (pp. 79-91). Cambridge, MA: Harvard University Press.
- Woods, B. S., & Murphy, P. K. (2002). Thickening the discussion: Inspecting constructivist theories of knowledge through a Jamesian lens. *Educational Theory*, 52, 43-59.

## APPENDICES

## Appendix A

### Identifying Information For IRB

**Title of Research Project:** The role and value of interdisciplinary studies in higher education specifically the perception of New College Students at The University of Alabama.

**Type of Proposal:** NEW

#### **The Purpose of the Study**

Purpose of the Study

The purpose of the proposed study is to investigate New College Students perception of their role and value at The University of Alabama (UA) pertaining to interdisciplinary studies. In addition, the researcher seeks to study the perceptions and views of interdisciplinary education within non-New College students and University of Alabama administrators.

#### **Investigators hope to learn from study**

The current research study is important because of the growing interest in interdisciplinary studies in and with the increased student enrollment educators must have current data in serving students population needs and effectively running institutions of higher education.

#### Research Questions

The researcher will explore the following questions:

1. What are the background characteristics of students in the New College baccalaureate degree program at The University of Alabama?
2. What range of topics and disciplines make up the Depth Study areas selected by students in The University of Alabama's New College baccalaureate degree program?
3. What attitudes and beliefs do students in The University of Alabama's New College baccalaureate degree program hold concerning:
  - a. The meaning of an interdisciplinary education,
  - b. The value of an interdisciplinary education,
  - c. Their reasons for choosing to seek a degree in UA's New College,
  - d. The components of the UA New College degree program,
  - e. The value and benefits of completing a degree in UA's New College,
  - f. The skills and knowledge developed through participation in UA's New College,
  - g. The challenges faced in completing a degree in UA's New College,
  - h. The quality of education activities experienced in UA's New College,
  - i. The student's role and responsibility regarding governance and decision-making in UA's New College, and
  - j. The importance of life-long learning?

4. How do these attitudes and beliefs differ based upon the following characteristics of New College students?
  - a. Gender
  - b. Race
  - c. Class (i.e., freshman, sophomore, junior, senior)

### **Procedures**

#### **Description of procedures to be performed:**

The participants include New College Student, Non-New College students and University of Alabama Administrators. New College students will be selected from their respective class ranking and will be emailed a consent form within The University of Alabama New College list server to fill out. The researcher hopes to have the participation of between 30 to 40 students. The researcher would like the participation of 10 – 20 non-New Colleges for this study. The University of Alabama administrators will be sent emails by their University of Alabama CampusMail account. The researcher would like the participation of 10 – 20 administrators. Once the consent forms have been emailed back these individuals will then be asked to complete a survey of questions based on the research questions.

The study will be conducted by using the online survey software Survey Monkey ([www.serveymonkey.com](http://www.serveymonkey.com)) Instructions on how to complete the survey are included in the informed consent page. The survey will only take participants approximately 10-15 minutes to complete based on them completing one question per minute. If there has been no response by participants, they will be contacted by and interviewed by telephone using the same questionnaire. No incentives will be offered or provided to any participant that agree to take part in the survey. However, there are no direct benefits to you to your participating but you will be contributing to the limited amount of information on interdisciplinary studies students. Each email address will be given assigned a participant number to maintain anonymity and confidentiality of the data. Collected data will be initially stored online, however final results will be downloaded and transferred to secure server password protected.

### **Risks and Benefits**

Potential risks: none that can be foreseeable

Benefit: To take part in a study that will hopefully add to the limited amount of information on interdisciplinary studies and students in higher education with a particular focus on the perception of their role and value at The University of Alabama.

## Appendix B

### Purpose for Research Study

#### **The University Of Alabama What is this study about?**

This research study is being conducted during April and May to analyze the role of interdisciplinary liberal arts within Higher Education programs specifically investigating New College Students perception of their role and value at The University of Alabama.

#### **Why is this study important –what good will the results do?**

The current research study is important because of the growing interest in interdisciplinary studies in and with the increased student enrollment educators must have current data in serving students population needs and effectively running institutions of higher education.

#### **Why have I been asked to take part in this study?**

You have been asked to take part in this study because you are a New College student or have a vested interest in interdisciplinary studies in higher education.

#### **How many people besides me will be in the study?**

The researcher hopes to have a sample of 30-40 New College students, 10 – 20 non-New College students and 10- 20 University of Alabama administrators.

#### **What will I be asked to do in this study?**

In the event that you decide to take part in this study you will be asked to complete a short survey on [www.surveymonkey.com](http://www.surveymonkey.com) an online survey tool.

#### **How much time will I spend being in this study?**

The study will take about 5-15 minutes.

#### **How much time will I spend being in this study?**

Completing this short consent form should take no more than 3 to 5 minutes. After completing the consent form you will be emailed a copy for your records.

#### **Will I be paid for being in this study?**

You will not be compensated by payment for being in this study

#### **Will being in this study cost me anything?**

There will be no cost to you except for your time in completing a survey

#### **Can the researcher take me out of the study?**

Your involvement is voluntary at all times, in the event that you wish to withdraw from the study You will not be penalized in any way.

**What are the benefits (good things) that may happen to me if I am in this study?**

There are no direct benefits to you to your participating but you will be contributing to the limited amount of information on interdisciplinary studies students.

**What are the benefits to scientists or society?**

Involvement in this study may lead to an improved understanding of interdisciplinary studies and New College students at The University of Alabama.

**What are the risk ( dangers or harm) to me if I am in this study?**

Although some questions may make you feel uncomfortable to answer, there are no foreseeable risks beyond those encountered in everyday life.

**How will my confidentiality (privacy) be protected? What will happen to the information the study?**

Be aware that in each stage of this survey and study your identity will remain anonymous; all persons will be referred to only by a number or letter your name will only appear on the consent form.

**What are the alternatives to being in this study? Do I have a choices?**

The alternative/other choice is not to participate.

**What are my rights as a participant?**

Taking part in this study is an optional it is your free choice. You many choose not to take part at all anytime. If you begin the study, you can stop at any time. Leaving the study will not result in any penalty or loss of benefits you potentially could receive.

**Who do I call if I have questions or problems.**

In the event that you might have any general questions or concerns please feel free to contact LaToya Scott at 205-394-8949 or [scott060@sa.ua.edu](mailto:scott060@sa.ua.edu) leave message including a phone number or e-mail address were you can be reached. For any questions about your rights as a research participant you may contact Ms. Tanta Myles, The University of Alabama Compliance Officer, at 1-205-348-5152.

I have read this consent form. The study has been explained to me. I understand what I will be asked to do. In addition I freely agree to take part in this research study. I will receive a copy of this consent form to keep. In the event that you agree to the above information and wish to participate, please sign below.

Signature of participant \_\_\_\_\_ Date \_\_\_\_\_

Signature of Investigator \_\_\_\_\_ Date \_\_\_\_\_

## Appendix C

### Informed Consent

You are being asked to take part in the Interdisciplinary Studies Survey by LaToya Scott, a Masters student in the Higher Education Administration program, supervised by David E. Hardy, Ph.D who is a professor in the Higher Education Administration program within the College of Education at the University. The purpose of the proposed study is to investigate the perceptions of currently enrolled New College students at the University of Alabama regarding the role and value of participation in an interdisciplinary studies baccalaureate program.

Through the collection and analysis of survey data, the researcher hopes to identify ways in which the programs offered by UA's New College can be improved and/or expanded, and to better understand students' perceptions on the nature of learning, education and, in particular, interdisciplinary studies. Participants in the Study: You have been asked to participate in this study because you have been identified as a University OF Alabama Student enrolled in the New College Interdisciplinary Studies Program. Approximately 180 current students have been identified at the University of Alabama who might be interested in participating in the research study survey conducted.

Procedure for the Study: If you agree to participate in this study, you will be asked to complete an interdisciplinary studies web survey. In the event that you agree to take part, you will be provided with information instructing you how to complete the web survey. The instrument should take approximately 15 to 20 minutes to complete. Participants will be asked to respond to statements honestly and to the best of their ability. If you require any special accommodations, please notify the principal investigator and every effort to meet your request will be made.

Benefits of participating in the Study: By participating in this study you will be contributing to the limited research focusing on interdisciplinary studies student perceptions. No other personal benefits to participants have been identified, and no compensation is being provided to participants.

Risks of Taking Part in the Study: In taking part in this study it is possible that you will be uncomfortable responding to the survey items. In order to minimize risks, no unnecessary questions will be asked at any time within the survey. Please be aware that you are free to decline to answer any question on the survey that might contribute to feeling uncomfortable. Choosing to skip individual questions will not exclude you from participation in the study. If, at any time during the completion of the survey you wish to cease participating, you may do so without any negative consequences.

Confidentiality: All information is confidential data, and will be kept in a secure location accessible only to the researcher administering the survey. In addition, no personally identifiable information such as participants name, student ID number, etc., will be collected in this study, so participant's confidentiality will be maintained.

Voluntary Nature of Study: Taking part in this study is voluntary at all times. You may choose to withdraw from the study at any point. Leaving the study will not result in any consequences.

Contact for Questions or Problems: For questions about the study, please contact the principal investigator, LaToya Scott, at (205) 394-8949 or [scott060@sa.ua.edu](mailto:scott060@sa.ua.edu) or David Hardy, at (205) 348-6874 or [dhardy@bamaed.ua.edu](mailto:dhardy@bamaed.ua.edu). For questions about rights as a research participant or to discuss problems, complaints or concerns about a research study, or to obtain information, or offer input, you may call Tanta Myles, The Research Compliance Officer at UA (205) 348-8461 or toll free 1-877-820-3066

## Appendix D

### Copy of initial email invitation

You are being asked to take part in the Interdisciplinary Studies Survey by LaToya Scott, a Masters student in the Higher Education Administration program, supervised by David E. Hardy, Ph.D who is a professor in the Higher Education Administration program within the College of Education at the University. The purpose of the proposed study is to investigate the perceptions of currently enrolled New College students at the University of Alabama regarding the role and value of participation in an interdisciplinary studies baccalaureate program.

Through the collection and analysis of survey data, the researcher hopes to identify ways in which the programs offered by UA's New College can be improved and/or expanded, and to better understand students' perceptions on the nature of learning, education and, in particular, interdisciplinary studies. Participants in the Study: You have been asked to participate in this study because you have been identified as a University OF Alabama Student enrolled in the New College Interdisciplinary Studies Program. Approximately 180 current students have been identified at the University of Alabama who might be interested in participating in the research study survey conducted.

Procedure for the Study: If you agree to participate in this study, you will be asked to complete an interdisciplinary studies web survey. In the event that you agree to take part, you will be provided with information instructing you how to complete the web survey. The instrument

should take approximately 15 to 20 minutes to complete. Participants will be asked to respond to statements honestly and to the best of their ability. If you require any special accommodations, please notify the principal investigator and every effort to meet your request will be made.

**Benefits of participating in the Study:** By participating in this study you will be contributing to the limited research focusing on interdisciplinary studies student perceptions. No other personal benefits to participants have been identified, and no compensation is being provided to participants.

**Risks of Taking Part in the Study:** In taking part in this study it is possible that you will be uncomfortable responding to the survey items. In order to minimize risks, no unnecessary questions will be asked at any time within the survey. Please be aware that you are free to decline to answer any question on the survey that might contribute to feeling uncomfortable. Choosing to skip individual questions will not exclude you from participation in the study. If, at any time during the completion of the survey you wish to cease participating, you may do so without any negative consequences.

**Confidentiality:** All information is confidential data, and will be kept in a secure location accessible only to the researcher administering the survey. In addition, no personally identifiable information such as participants name, student ID number, etc., will be collected in this study, so participant's confidentiality will be maintained.

Voluntary Nature of Study: Taking part in this study is voluntary at all times. You may choose to withdraw from the study at any point. Leaving the study will not result in any consequences.

Contact for Questions or Problems: For questions about the study, please contact the principal investigator, LaToya Scott, at (205) 394-8949 or [scott060@sa.ua.edu](mailto:scott060@sa.ua.edu) or David Hardy, at (205) 348-6874 or [dhardy@bamaed.ua.edu](mailto:dhardy@bamaed.ua.edu). For questions about rights as a research participant or to discuss problems, complaints or concerns about a research study, or to obtain information, or offer input, you may call Tanta Myles, The Research Compliance Officer at UA (205) 348-8461 or toll free 1-877-820-3066

<https://www.surveymonkey.com/s/6QMQ9HD>

Appendix E

Thesis Survey

**1. I have read the consent form and understand what I will be asked to do by clicking on the bottom below. I freely agree to take part in this research study. I may print a copy of this consent form to keep.**

I agree to participate

I decline to participate.

**2. Gender (Choose One)**

Female

Male

**3. Class Ranking (Choose one)**

Freshmen

Junior

Sophomore

Senior

**4. Race (Check all that apply)**

African American

Hispanic

American Indian/Alaskan Native

Pacific Islander/Hawaiian Native

Asian

Other

Caucasian

**5. Age (Choose one)**

19

22

25

20

23

26 or older

21

23

**6. Housing (Choose one)**

On-Campus

Off-Campus

**7. What is your current GPA on a 4-point scale? (Example: 3.76)**

**8. What Depth Study or area of general interest did you indicate in your essay for admission to New College.**

**9. Has your Depth Study or Area of interest changed since being admitted to New College?**

Yes

No

**10. If "Yes," what is your Depth Study or area of interest now ?**

**11. How and why did you decide to be a New College student rather than to pursue a traditional major program of study at UA.**

**12. Please indicate the degree to which you agree or disagree with each of the following statements:**

Scale

Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

**A.** Participating in interdisciplinary studies has helped me develop a high level of problem solving strategies.

**B.** The interdisciplinary studies program has allowed me to prepare myself for my future career.

**C.** My interdisciplinary studies experience has given me the ability to think and reason in multiple ways.

**D.** I believe that my interdisciplinary experience has given me the desire to continue engaging in learning experiences throughout my lifetime.

**E.** My interdisciplinary education plays a large role in my success in college.

**F.** My interdisciplinary education has great value in my success in college.

**G.** By being a part of a interdisciplinary program I have a clear understanding of how to connect numerous theories across several disciplines.

**H.** New College's small, intimate seminars build a strong sense of community among participants.

**I.** New College seminars add value to my education.

**J.** New College's individual faculty advising and mentoring affirms my individuality.

**K.** The ability to design a depth study provides me with a strong sense of a autonomy.

**L.** New College joint faculty and student outings foster meaningful academic relationships.

**M.** The New College program helps me to break down social barriers.

**N.** The New College program helps me to break down academic barriers.

**O.** I am passionate about my major.

**P.** I have a strong sense of ownership and accountability for my own education.

**Q.** The New College program consistently challenges me to think creatively.

**R.** New College provides me with frequent opportunities to interact with peers who have a common intellectual experience and interest.

S. Completing the formal New College application and admission process has made me value my New College experience more.

T. Being included in the New College admissions decision-making process provides me with real involvement and connection to the program.

U. The New College curriculum encourages me to know theories AND to examine ways those theories can be applied in various situations.

**13. Please indicate the degree to which you agree or disagree with each of the following statements:**

Scale

Strongly Agree   Agree   Neutral   Disagree Strongly   Disagree   N/A

New College's out-of-class experiences such as internships and service projects have added value to my interdisciplinary education.

New College's independent study projects have added value to my interdisciplinary education.

**14. In your own words, what is an interdisciplinary studies program?**

**15. What do you feel is the greatest benefit that you get from being a New College student?**

**16. Please describe the greatest challenge that you have faced within the New College interdisciplinary program.**

**17. Please provide suggestions for improvement of the New College program.**

## Appendix F

### IRB Protocol Approval

From: [jgraham@fa.ua.edu](mailto:jgraham@fa.ua.edu) [<mailto:jgraham@fa.ua.edu>]  
Sent: Tuesday, January 12, 2010 3:16 PM  
To: Hardy, David  
Subject: Protocol approved, LaToya Scott 735

The following human subjects protocol application has been approved by the IRB, effective 01/22/2010. In order to view the approval letter, along with the approved consent documents or other approved documents, as applicable, open the protocol and view attachments. If you have problems viewing the IRB Approval document, please call the Office for Research Compliance at 205.348.5152.

Protocol Principal Investigator: LaToya Scott

Protocol Title: The Perceptions of New College Students at The University of Alabama Regarding the Role and Value of Interdisciplinary Studies

Protocol Number: 735

Submission include 735 Survey, Certificate of Completion 1, Follow-up email, Follow-up email # 2, Invitation and Informed Consent, New College Students Perceptions Survey, Scott EX-09-CM-091

Office for Research  
Office of the Director of  
Research Compliance

THE UNIVERSITY OF  
**ALABAMA**  
R E S E A R C H

December 23, 2009

LaToya Scott  
ELPTS  
College of Education  
Box 870231

Re: IRB# : EX-09-CM-091, The Perceptions of New College Students at the University of Alabama Regarding the Role and Value of Interdisciplinary Studies

Dear Ms. Scott:

Your application has been given exempt approval according to 45 CFR part 46.101(b)(2) as outlined below:

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:  
(i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

This approval expires on 12/22/10. If the study continues beyond that date, you must complete the appropriate portion of the Continuing Review and Closure Form. If you modify the application, please complete the Modification of an Approved Protocol Form. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants. When the study closes, please complete the Continuing Review and Closure for closure.

Should you need to submit any further correspondence regarding this application, please include the assigned IRB application number.

Good luck with your research.

Sincerely,

Carpantato J. Myies, MSW, CIM  
Director & Research Compliance Officer  
Office for Research Compliance  
The University of Alabama



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