Motivations for service-learning among family and consumer sciences college faculty: influence of teaching perceptions, efficacy, and practice

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Motivations for service-learning among family and consumer sciences college faculty:
Influence of teaching perceptions, efficacy, and practice

by

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A dissertation submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

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2005

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For the Major Program
Dedication

To my father-in-law, S. P. Banerjee, for his sacrifice

To my husband, Kaushik, for his continuous support and inspiration

To my son, Rohan, for his love and understanding

To my father, G. C. Bagchi, mother, Anima Bagchi, mother-in-law, Anuradha Banerjee, and sister, Madhubanti Bagchi for their prayers and encouragement.
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ABSTRACT

Trying to understand connections between Family and Consumer Sciences (FCS) and service-learning could improve the implementation process of this pedagogy in FCS courses. According to Giles and Eyler (1998), identifying ways by which service-learning can enhance subject matter learning is the first of their top ten unanswered questions in service-learning research. The primary objective of this study was to examine characteristics of FCS collegiate faculty who do and do not incorporate service-learning in their teaching, determine their teaching efficacy levels and dominant teaching perspectives, examine their perceptions about service-learning as an effective teaching strategy within FCS, and identify the factors that motivate and deter FCS faculty’s use of service-learning.

Survey results from 375 FCS faculty members in institutions of higher education across the United States confirm the belief that service-learning can be an effective tool for learning and teaching within FCS. Almost 60% of the FCS faculty reported to have implemented service-learning in their teaching. Both service-learning and non service-learning faculty, in general, had high teaching efficacy levels. The dominant teaching practice for all faculty was Reflective-Ethical, irrespective of whether they were service-learning or non service-learning faculty.

Service-learning faculty received encouragement from department chairpersons and other colleagues in the department. Advice from colleagues and attendance at professional organizations and conferences provided faculty with useful instructional support. Student outcomes motivated faculty most in their decisions to incorporate service-learning. Concerns related to time, logistics, and funding; reward structure; and inability to use service-learning effectively were reported to be potential factors that might cause faculty to discontinue their
service-learning efforts. For non service-learning faculty, issues related to time, logistics, and funding; and curricular and pedagogical concerns, were the greatest deterrents to using service-learning.
CHAPTER 1.
INTRODUCTION

Background

Change is not new to higher education in America. However, in congruence with the changes in the past, such as those that occurred during the turn of the century or World War II, higher education may be poised for change that is quite different from previous trends (Kennedy, 1996). Changes in technology and the advent of information systems have challenged educators to rethink their teaching and learning in a new way. Simultaneously, calls to reexamine the nature of scholarship (Boyer, 1994) and the work of the scholar (Plater, 1996; Rice, 1996) have challenged institutions of higher education to reach beyond their traditional roles and responsibilities. Embedded within this latter challenge is a re-examination of the role that service and outreach play in the application of knowledge, epistemology, faculty work, and the structural nature of institutions of higher education (Bringle, Hatcher, & Games, 1997).

Service-learning is associated with this current wave of change in higher education. Although the role of service in instruction has historical roots (Harkavy & Puckett, 1994), service-learning is currently demonstrating a surge of growth that can be regarded as a distinct stage of curricular reform. Both Campus Compact and the Corporation for National Service (e.g., Learn and Serve America: Higher Education) have stimulated rapid growth in the number of campuses offering service-learning courses, the number of service-learning classes being offered, and the number of faculty and students involved in service-learning (Bringle et al., 1997).
Service-learning Defined

Many definitions have been used to define service-learning. To date about 147 definitions have been found in the literature combining service with learning (Kendall, 1990). For the purposes of this research, service-learning is defined as a course-based, credit-bearing educational experience in which students participate in organized service that meets community needs, and reflect on the service to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility (Bringle & Hatcher, 1996). The hyphen in service-learning symbolizes the symbiotic relationship between service and learning (Jacoby & Associates, 1996). The primary value of service-learning resides in its capacity to enrich student learning in the broadest sense through carefully selected community service activities integrated with course material. Service-learning challenges students to evaluate course material critically as they apply theoretical knowledge to practical situations. Students receive credit for the learning that results from their participation in community service, not for the community service activity itself (Howard, 1993). In addition, service-learning provides a means for teaching civic education and fostering social responsibility (Barber, 1991; Barber & Battistoni, 1994).

Service-learning and Family and Consumer Sciences

Education is a process by which society transmits basic knowledge, attitudes, and skills necessary for an effective and productive life. Family and Consumer Sciences (FCS) education has the dual objective of preparing students for careers and other life roles such as citizen and parent. FCS education promotes individual and family well-being by providing educational experiences that enable individuals to develop, integrate, and apply a
multidisciplinary body of knowledge in dealing with the basic and higher level needs of individuals and families (Vail, 1998).

The family and consumer sciences field is an evolutionary discipline. Changes and revisions are taking place on a continuous basis to reflect the evolutionary and adaptive nature of the field. The FCS profession, with its focus on families as the basic socio-economic unit of a democracy, has the potential for contributing to the sustainability of society. There are roles to be played both collectively as professionals and individually to fulfill its purpose to be a source and voice for families. According to Braun and Williams (2002), the family is key to civic engagement. They asserted that when people are personally involved in a public issue, they will actively participate in policy actions related to the issue. However, more and more families and individuals remain disengaged. National founders such as John Adams and Thomas Jefferson believed that democracy could be preserved through active involvement of the citizenry in community efforts and public decision-making. Service-learning supports the development of committed and thoughtful citizens who, in turn, can provide a solid foundation to democracy. Service-learning, in its quest for developing committed and thoughtful citizens, can be used as a tool to further FCS education.

A study by Eyler and Giles (1999) surveying more than 1,500 college students found that participation in high quality service-learning leads to the values, knowledge, skills, efficacy, and commitment that underlie effective citizenship. These outcomes match the results of other studies that affirm the positive effects of service-learning on indicators of personal and social responsibility, compassion toward the disadvantaged, commitment to an
ethic of service, sense of agency as a community leader, and acceptance of diversity (Kahne, Westheimer, & Rogers, 2000).

Service-learning can integrate well with the goals of the FCS profession. An aim of the profession is to develop and strengthen individuals and families as basic units of democracy. Emerging societal issues and concerns impacting individual, family, and community well-being are changing over time. The FCS profession historically has led the way in focusing on and addressing such issues and concerns central to the mission of the profession. The nation is undergoing significant changes. An aging population, high birth rates among racial and ethnic minorities, legal and illegal immigration, multiculturalism, and increasing diversity in the structure and living patterns of American families warrant the need for citizens who are able to overcome the challenges that evolve from increasing diversity. FCS education coupled with service-learning can help produce students and professionals, who will have the knowledge to seek solutions to the complex needs and problems of increasingly diverse families. Service participation and FCS education can bring together the resources of individuals and communities in partnerships that, in turn, will support healthy, independent, and self-sustaining families.

The challenge for family and consumer sciences educators lies in preparing learners for an ever-changing and ever-evolving society so that they grow to be responsible citizens and stand against the harmful trends in the society. In response to these changing family needs and issues, support is growing for public education to include parenting and family related instruction in the curriculum. Similarly, support is growing for inclusion of a service component in FCS courses so that students can link the work they do in the classroom to practical needs and problems. For example, in a course on housing at a large Midwestern
university that employs service-learning as part of the curriculum, students visit with and assist families and individuals with special needs, including the disabled, the homeless, low income, and single parents to find affordable housing in rural and metropolitan areas. They communicate and participate in service activities that support active and collaborative learning, and exchange ideas between the students and the special needs community. In another service-learning course, students participate in programs that serve children and families with diverse needs and become aware of employment/career opportunities available in the human services field. Here, service participation gives students hands-on experience in a professional setting and provides them with the opportunity to explore the skills and preparation required for working in the service profession.

**Teaching Practice and Teacher Efficacy**

Although considerable discussion of teaching practices exists (Vaines, 1997; Vaines & Wilson, 1986; Wilson & Vaines, 1985), there has been limited analysis of teaching practices in our profession. Vaines (1997) identified three modes of professional practice that influence a person’s teaching practices: Technical-Rational mode of practice, Reflective mode of practice, and No-Choice mode of practice. Each mode of practice has implications and meaning for professional development and teaching practices. According to Wilson and Vaines (1985), practice forms the mediating link between the knowledge within a profession and the way that knowledge is integrated and translated for the benefit of society. In the field of FCS, practice is represented by what professionals do in terms of teaching, research, and service as they seek to improve the well being of families in socially responsible ways. Plihal, Laird, and Rehm (1999) argue that we must acknowledge the need to change the strategies we have traditionally used in an FCS classroom. Essential to this change is a
continuing pursuit of alternative teaching perspectives characterized by a critical science perspective that more adequately reflects the rapidly changing social conditions encountered by individuals and families.

Adopting a critical science approach to curriculum and teaching was first suggested by Brown and Paolucci (1979) and later by Brown (1980). A critical science approach enables us to deal with the changing complexity of daily life, moving beyond the traditional approach that allows us to say things like, "I was taught this way. This is the way it has always been done. This is all I know how to do. This is what the textbook says. This is what the curriculum says I have to teach" (McGregor, 2003, p. 1). The critical science approach helps us probe beneath the surface meanings of words and symbols to comprehend root causes of problems instead of treating the symptoms from a technical, quick-fix perspective. Critical science perspective to teaching involves reflection, critique, and emancipative action. Service-learning, on the other hand, embraces reflection and fosters citizenship, defined as the ongoing contribution of citizens to get involved and address community needs (McGregor, 2002). In our profession, the primary concern is to provide service contributing to the welfare of individuals and families. Thus, service-learning as pedagogy complements the alternative critical science approach.

According to Patel (2004), personality characters such as efficacy are essential for the sustainability of service-learning. Efficacious educators, who believe service-learning can contribute as a pedagogy in FCS curriculum, will continue to utilize service-learning even when confronted with inevitable issues such as difficulty with logistics, budget cuts, or lack of support by administration. This research investigates if service-learning faculty have higher efficacy levels than their non service-learning counterparts.
Purpose

Service-learning has been identified as a strategic new direction for the FCS profession (Mitstifer & Miller, 1999). In her article “Bringing service-learning to FCS higher education,” McGregor (2002) discussed three recent studies from the field of FCS that represent some ambiguity among members about the current status of the use of service-learning in the profession. According to Paulins (1999), service-learning is not new to the FCS profession. It has been implemented as a pedagogy, although the terminology is new. To support this notion, McGregor referred to the clauses in the American Association of Family and Consumer Sciences’ (AAFCS) mission statement pertaining to assuming leadership roles, taking action on critical issues, and empowering members to act on social concerns. Hendricks and Kari (1998) believed that service-learning should be embraced by the FCS profession and wondered how curriculum in FCS can facilitate civic identities among students. Finally, Leach (1998) asserted that FCS may be suited for service-learning because the profession has an interactive ecological perspective. Like McGregor (2002), I believe that service-learning can be a value-added curriculum strategy for learning and teaching within FCS. This research investigates whether faculty believe that service-learning can be an effective pedagogy in FCS, the dominant teaching practices of FCS faculty, their teaching efficacy levels, and the factors that motivate or deter faculty in their use of service-learning.

The major research questions for this study are:

- What are the personal characteristics of collegiate FCS faculty who do and do not incorporate service-learning in their courses with respect to teaching content area, faculty rank, tenure status, number of years in college teaching, major professional
responsibilities held, number of service-learning courses taught, age, gender, and race?

- What are the teacher efficacy levels of collegiate FCS faculty who do and do not incorporate service-learning in their courses?
- What are the dominant teaching practices of collegiate FCS faculty who do and do not incorporate service-learning in their courses?
- What are collegiate FCS faculty members’ perceptions of service-learning as a value-added teaching practice for learning and teaching within FCS?
- What are the factors that motivate collegiate FCS faculty in implementing service-learning in their courses?
- What are the factors that deter collegiate FCS faculty in implementing service-learning in their courses?

**Importance**

An increasing number of colleges and universities are committing institutional resources to expand student learning and community assets through service-learning partnerships. This study explores college faculty’s perception about service-learning as a value-added curriculum strategy within FCS. Understanding faculty’s perceptions about service-learning as an effective tool for teaching and learning within FCS can improve the implementation process of this new pedagogy in courses, while enriching our understanding of how to utilize this method in furthering the goals of the profession.

A critical science perspective is needed in FCS to better understand the relationship between the socio-cultural world and the family (Plihal et al., 1999). This research
investigates faculty’s perceptions about service-learning as a value-added teaching strategy in FCS. This study may provide insights about how service-learning can enhance subject matter learning in specific disciplines (here FCS), which Giles and Eyler (1998) identify as the first of their top ten unanswered questions in service-learning research.

The study examines professional characteristics of FCS faculty related to the dominant mode of teaching practice and teacher efficacy level. Although Wilson and Vaines (1985) and later Vaines (1997) investigated the concept of professional practice and teaching perspectives, there has been limited study regarding FCS collegiate faculty’s teaching practices. Given service-learning’s compatibility with a critical science perspective to teaching, it will be worthwhile to know if faculty members are practicing a mode of teaching which has closer compatibility with service-learning. This might shed light on whether service-learning can be implemented in FCS classrooms with considerable ease or not.

What we know at this point about service-learning and its implementation efficacy in FCS is very limited. This study inquires into the efficacy levels of faculty who do and do not include service-learning in their courses. The efficacy scores might help explain their willingness or reluctance to incorporate service-learning in courses.

This study explores factors that motivate and deter faculty’s use of service-learning in FCS. As a teaching strategy found to empower students and build positive student outcomes, service-learning has not been a widely prevalent method of teaching at most colleges and universities (Bringle et al., 1997). Continuing to discover faculty motivations and deterrents with service-learning can yield insights for attracting faculty to service-learning in FCS.

Weigert (1998) queried that given the formidable challenges presented by service-learning, why should faculty take on the hard work of incorporating service-learning in their
courses? Prior research studies have reported faculty satisfaction with service-learning as it allowed them to integrate their academic goals with their own desire to “make a difference” in communities or to work toward social change (Driscoll, 2000). Interviews of newly hired faculty in the Driscoll, Holland, Gelmon, and Kerrigan (1996) case studies revealed that a number of recent graduates from doctoral programs sought out university appointments in which there was potential for just such integration. Thus, an investigation of this source of satisfaction can also yield insights for attracting or motivating faculty to service-learning.

Faculty members play key roles on campuses that affect service-learning’s future. They develop and teach courses, oversee the curriculum, initiate and maintain relationships with students, and design and make program decisions. Therefore, it is essential to study faculty in the context of service-learning to expand our understanding of their role and direct our support of that role.
CHAPTER 2.
LITERATURE REVIEW

This chapter provides a review of literature regarding the different forms of service-learning practiced across institutions of higher education in the United States, the role of reflection and reciprocity in service-learning, its fit as an effective teaching strategy in Family and Consumer Sciences, and service-learning projects around the world. Faculty motivation and deterrents related to service-learning are examined thereafter. Teaching perspectives employed by faculty in FCS courses are reviewed next, followed by a discussion of teacher efficacy and its variants such as personal and general teacher efficacy. The chapter concludes with a review of personal and demographic characteristics of FCS faculty.

Service-learning

Student enthusiasm and faculty belief in the power of service to enhance learning has helped to create a surge of interest in service-learning opportunities on campuses. There are a variety of programs labeled service-learning. On one extreme are courses with one or two outings for community service, while at the other extreme there are well-integrated programs within colleges and universities where students spend a semester to a year in a series of connected courses linked to service projects in the community. Sigmon (1996) proposed a useful service and learning typology with four variations found at colleges and universities. 1) “SERVICE-learning” implies that service goals are primary and learning outcomes are secondary. A course where students hear something about the community agencies and the primary focus is inspiring the students to participate in some kind of service for an agency
fits such a definition. 2) Another course where learning goals are primary with a small service component embedded in the curriculum fits the “service-LEARNING” definition. 3) A course where students learn to develop program evaluation skills by assisting a local agency with their evaluation fits Sigmon’s “SERVICE-LEARNING” category. This term applies to programs where the two foci are in balance, and study and action are explicitly integrated. Here, service and learning goals are of equal weight. 4) On the other hand, “service-learning” includes a balance between service to the community and academic learning, where service and learning goals are separate and may carry unequal weight. Here, reflection plays a major role in the process of learning through community experiences.

As a form of experiential education, service-learning is based on the pedagogical principle that learning and development do not necessarily occur as a result of experience itself, but as a result of a reflective component explicitly designed to foster learning and development. Many programs often do not fit this balanced model and either the service component dwarfs the learning or the academic focus dominates. There is also evidence that quality and quantity of written reflection in program descriptions may not depict the actual experiences of students (Jacoby & Associates, 1996).

**The Role of Reflection and Reciprocity**

The work of learning theorists and researchers like Jean Piaget and William Perry, or James Coleman and David Kolb indicate that we learn through combinations of thought and action, reflection and practice, theory and application (Jacoby & Associates, 1996). Different service-learning programs emphasize different types of learning goals: intellectual, civic, ethical, moral, cross-cultural, career, and personal (Kendall, 1990). Service-learning
programs are also explicitly structured to promote learning about the larger social issues behind the needs to which their service is responding. This learning includes a deeper understanding of the historical, sociological, cultural, economic, and political contexts of the needs and issues being addressed (Kendall, 1990). For example, reflection could be designed to encourage students working in a homeless shelter to ask such questions as: Why are there homeless people? What national and state policies affect homelessness? Why do we create homeless shelters rather than identify and solve the root causes of the problem? Is homelessness a global problem? If so, how do other countries deal with it?

The other essential concept of service-learning is reciprocity between the server and the person or group being served. According to Kendall (1990), both the server and those served teach, and both learn. Through reciprocity, students develop a greater sense of belonging and responsibility as members of a larger community. Both community members being served and students learn about the issues at hand, how to take responsibility for their own actions, and, in turn, become empowered to develop relationships and skills to address needs (Jacoby & Associates, 1996). Reciprocity creates a sense of mutual responsibility and respect between individuals in the service-learning exchange (Kendall, 1990). Reciprocity also eschews the traditional concept of volunteerism, which is based on the idea that a more competent person comes to the aid of a less competent person. In the old paradigm, volunteers often attempt to solve problems without fully understanding the situations or their causes. Service-learning alternatively encourages students to do things with others rather than for them (Karasik, 1993).

In numerous contexts, service-learning is often referred to as a program. However, it is important to note that service-learning is also a philosophy and pedagogy. As a program,
service-learning emphasizes the accomplishment of tasks to meet human and community needs in combination with “intentional learning goals and with conscious reflection and critical analysis” (Kendall, 1990, p. 20). Direct tasks in which participants engage could be tutoring, and working in soup kitchens or homeless shelters. Tasks may also include advocacy and policy level work related to housing, education, environment, and human services. As a program type, service-learning encompasses evaluation of its effects on students, as well as on the individuals and community members served. Service-learning may also be termed as a philosophy of “human growth and purpose, a social vision, an approach to community, and a way of knowing” (Kendall, 1990, p. 23).

According to Stanton (1990), it is the element of reciprocity that elevates service-learning to the level of philosophy. Stanton said that service-learning was an expression of values — service to others, community development and empowerment, reciprocal learning — which determines the purpose, nature, and process of social and educational exchange between learners and the people they serve. As pedagogy, service-learning is education that is grounded in experience as a basis for learning and employs deliberate use of reflection to enable learning to occur (Jacoby & Associates, 1996).

Kolb’s concept of the experiential learning cycle (1984), based on the work of Dewey, Piaget, and Lewin, can be used to elucidate the role of service-learning as a pedagogy. Kolb’s model outlines the learning experience as a constantly revisited four-step cycle namely concrete experience, reflection on the experience, synthesis and abstract conceptualization, and active experimentation. Although one may enter the cycle at any point, a person engaged in service-learning often begins with concrete service experience and
then embarks on a period of reflection on that experience analyzing what actually occurred and the implications arising from those observations. Next, reflection stimulates the learner to integrate observations and implications with existing knowledge. The learner formulates concepts and questions to deepen self understanding of the issue at hand and the root causes of the need for service. In the final step of the model, the learner tests these concepts in different situations. This experimentation leads the learner to begin the cycle again and again.

**Service-learning – A Teaching Practice within FCS**

Scholars in FCS are urging professionals to practice a critical science mode of teaching in classrooms. The overarching theme of the critical science perspective comprises emancipatory action, liberation, and transformation or empowerment (Rehm, 1999). These terms point to the process of working toward the ultimate goal of gaining personal freedom from internal constraints such as biases, lack of skills, or distorted communication processes and gaining social freedom from external constraints such as oppression or exclusion. Service activities may provide learners with opportunities to acquire the skills and knowledge required for empowerment. The goal of the field of family and consumer sciences as envisioned by Brown and Paolucci (1979) is to

Enable families both as individual units and as a social institution to build and maintain systems of action which will lead to 1) maturation in individual self-formation and 2) enlightened, cooperative participation in the critique and formulation of social goals and means for accomplishing them (p. 3).
One way in which students, individuals, and families can be enabled is to empower them so that they develop the skills necessary for building and maintaining individual and societal well being. FCS education with well-integrated service learning opportunities can be instrumental in achieving this mission.

Evidence of stronger connections between FCS and service-learning could initiate new areas of research thus enriching our understanding of many issues currently receiving attention from scholars in FCS and service-learning. Additionally, such work may bolster the legitimacy of service-learning by demonstrating it as a value-added teaching strategy in the field of family and consumer sciences.

**Service-learning Aids in Understanding Critical Problems Facing Society**

The field of FCS is concerned with practical, perennial problems of individuals and families as they live in their communities. These problems, concerning children and families, are value-based problems that occur from generation to generation and are resolved through reflective judgment and action (Montgomery, 1999). FCS educators can help students examine such issues and problems by engaging them in planned service commitments, where they supplement their theoretical knowledge by interacting in community settings. Recurring concerns usually can be presented as “what should be done about” questions. To examine these issues, Montgomery and Davis (2004) pose a series of questions for students to consider:

What should be the nature of human relationships within the family, community, or the workplace? What communication skills are needed within the family, community, or the workplace? What personal, family, and community meanings are
associated with human relationships? How does society perceive child-parent
relationships? What resources are needed by families to meet human needs? What
beliefs are held about families that receive public assistance? Why? What beliefs
should be changed? What can individuals and families do to empower themselves?
What can the community do to empower themselves? (p. 26)

The very nature of the ill-structured problems we face routinely in a complex society
requires critical thinking capacities above those normally attained by American college
students (King, 1992). Ill-structured problems are complex and open-ended. Such problems
require the ability to recognize that the tasks are complicated and are embedded in complex
social context. Solutions to such problems require the ability to evaluate conflicting
information, and to understand there is no simple or definitive solution. Service-learning
programs that place students in contexts where their prejudices, previous experiences, and
assumptions about the world are challenged may create the circumstances necessary for
personal growth. Service-learning programs that create this cognitive dissonance and also
provide the structure in which to confront the challenge and seek further information and
experience provide conditions for improved cognitive development and problem solving
skills (Eyler & Giles, 1999).

Students must be able to apply knowledge learned in the classroom to new settings.
In order to use and reapply knowledge in appropriate settings, students need to learn in rich
contexts, such as complex simulations or community settings, and they need to be guided in
their reflections about the meaning and use of what they are learning. Bransford and his
colleagues found that students were not able to solve novel problems, even when they
involved principles that they had recently learned. Repeated application opportunities
coupled with coaching and reflection were necessary to increase the ability of students to use
what they learned (Bransford & Vye, 1989). Service-learning can help students acquire the
knowledge, reasoning skills, and experience needed to help resolve recurring concerns of the
family.

Whitehead commented “We cannot think first and act afterwards. From the moment
of birth, we are immersed in action, and can only fitfully guide it by taking thought.”
(Whitehead, 1994, p. 223). Acting and thinking cannot be severed as knowledge is always
embedded in context, and understanding is in the connections. For science students, work in
the laboratory provides some of the application practice that allows them to anchor their
understanding in experience. Service-learning allows students to test what they learn by
applying it to environmental problems in the community (Eyler & Giles, 1999). For students
in family and consumer sciences, community service may be the best way of providing some
of these same anchors.

*Service-learning Helps Instill Responsibility Among Students*

There have been numerous studies that explored the effects of service-learning on
students (Astin & Sax, 1998; Eyler & Giles, 1999; Eyler, Giles, & Braxton, 1997). Most of
these studies have delved into the impact of service-learning on such qualities as personal
efficacy, interpersonal skills, stereotyping, and on citizenship or civic engagement. This
body of research consistently shows a small but positive effect of service-learning on these
outcomes.
A study by Astin and Sax (1998) found that participation in service activities during the undergraduate years had positive effects on students' sense of civic responsibility. As a consequence of service participation, students became more strongly committed to helping others, serving their communities, promoting racial understanding, participating in volunteer work, and working for nonprofit organizations that strive to improve the overall well-being of individuals and families. Another study by Eyler and Giles (1999), surveying more than 1,500 college students, found that participation in high quality service-learning leads to the values, knowledge, skills, efficacy, and commitment that underlie effective citizenship. These outcomes match the results of other, smaller scale studies that affirm the positive effects of service-learning on indicators of personal and social responsibility, compassion toward the disadvantaged, commitment to an ethic of service, sense of agency as a community leader, and acceptance of diversity. The findings also constitute compelling evidence of the beneficial effects of service participation on life skills during the undergraduate years. Participation in service-learning courses enhanced students' leadership abilities and self-confidence. The Astin and Sax study (1998) also reported increases in a variety of other specific skills such as critical thinking, resolving conflicts, working cooperatively, getting along with people from different races and cultures, and understanding problems facing the community and the nation.

One of the major forms of service-learning practice has focused not only on learning about social problems, but on addressing them in the community through social action (Stanton, Giles, & Cruz, 1999). Students in service-learning projects function as contributing citizens in the society while acquiring skills and knowledge that equip them for later civic participation. As students mature in their service experience, they tend to move from a focus
on charitable activities to a concern for social justice (Delve, Mintz, & Stewart, 1990). This might lead to an enhanced sense of responsibility towards social cause. With their first exposure to a social problem, for example, poverty, students may tend to see the issues in terms of individual failings or misfortunes. However, with more experience, information, and thought, they may begin to see the complexity of factors surrounding these problems. All students may not experience the same transformation, but for some, service-learning may become a catalyst for instilling responsibility and the urge for social action (Eyler & Giles, 1999).

To date, research provides clear indications that engagement in service-learning has had positive effects on students’ sense of civic responsibility and supports the development of individuals who are more committed to civic engagement. This study explores faculty’s perceptions about service-learning in helping students assume a sense of responsibility and empowering them to address recurring concerns of the individual, family, and the community.

**Service-learning Assists in Empowering Students**

John Dewey’s vision for education underlies the contemporary service-learning movement. Dewey’s main convictions centered on the belief that education must focus on society’s most pressing problems and that students be engaged in community service that prepares them for lifelong commitment (Cummins, 2000). Community service often engages students across boundaries of culture, class, and race in activities that respond directly to pressing local issues. Cummins reported the experiences of students as organizers in a community setting. The study reported empowerment of both the students and community
members after the conclusion of the project. Students felt empowered after planning, prioritizing, and carrying out the project. The residents felt empowered when they were encouraged to come up with ideas for projects and to decide which ones to fund and how much to allocate to each. In Eyler and Giles’s (1999) study, the pleasure in helping others was closely related to student’s growing sense of personal competence. It helped increase their self-esteem and a sense of accomplishment. Feeling that what one does can make a difference has been well studied as self-efficacy, political efficacy, and personal agency. It has been a powerful indicator of active citizenship participation and the ability to act effectively and sustain purposive action in the face of obstacles (Bandura, 1997).

Service-learning, by providing the opportunity to act as well as offering an important context in which to act, can help students develop a feeling of empowerment. According to Rosenberg (2000), students are not empowered in the traditional classroom; rather, they are actually separated from the means of empowerment. The problem of empowerment appears to be related to the separation of an “unreal” world of education from a real world context (Speck, 2001). Forman and Wilkinson (1997) also suggest that traditional education separates students from participation in public life and does not provide them with the skills and knowledge needed for such participation. Rosenberg (2000) reiterated the belief that service-learning empowers students by making them responsible in a real world context, while giving them the support, encouragement, information, and skills necessary to be effective. In Eyler and Giles’ (1999) study, students choosing service-learning were found to have significantly higher personal efficacy levels. Students with an opportunity to take leadership in service activities saw how their skills made a difference and this led to increased self-confidence.
Service-learning Around the World

Service-learning in an international/intercultural setting is a dynamic way to learn about another culture, while simultaneously helping a local community help itself. Service-learning students in an international setting experience the unique opportunity of seeing different layers of the society in which they study. They not only interact with native college students, but also with the homeless, the elderly, people with disabilities, and orphaned children whom they serve. This provides students with a richer perspective, often not available in traditional classroom settings.

Educators around the world cite a variety of reasons for developing and supporting programs of service-learning. Overarching is their realization that colleges and universities must find ways of connecting with their communities, nations, and the world. They are aware that the problems society face are not one-dimensional. The inextricable links between problems such as lack of jobs, inadequate housing, and illiteracy demand that the resources of varying organizations and social institutions be brought together in a coordinated way for problems to be successfully addressed (Berry & Chisholm, 1999).

A review of service-learning initiatives around the world reveals two distinct patterns. In one, the college faculty and/or students work directly with a village or community group to organize a new project. Here, the university works in partnership with a particular community’s leaders to define the needs, develop the plans, and execute the project. In the second pattern, students work in an already established agency or project. The agency could be either a governmental establishment or a non-governmental organization (NGO).

In recent times, non-governmental organizations have been most prominent in catering to the needs of the people and lately even when governmental money is available, it
is being turned over to these local or international NGOs. These agencies are welcoming
students to assist in addressing a wide variety of needs. Compared to governmental agencies,
the NGOs are more flexible, less bound by regulations, able to respond quickly, and more
attuned to the cultural mores of the community. The agency defines the work to be
performed, and students fit into an already structured program, enriching and adding to it
through their service. Agency personnel supervise the service and the faculty directs
reflection and service.

According to the agencies, the most helpful service-learning programs are those that
allow the agencies to define the work to be done. Community agencies, which serve the
communities, seem to know well the demands of the local people and also know what
approaches work and do not work within the cultural context of that community. Institutions
that insist on defining the project may not always be aware of the priorities and this usually
creates additional problems for the agency.

The complex links between problems and across national borders requires that all
societal institutions join hands to address such global issues. Higher education can and
should be a major player in this call. Communities and agencies are welcoming the active
participation of college and university students, and of their institutions in addressing
problems and alleviating suffering.

Students engaged in service-learning around the world address a wide variety of
community and human needs. Teaching is the foremost way that students are contributing to
the society. Students work as tutors in poor and impoverished communities. In
Johannesburg, South Africa, university students tutored underprepared black high school
students for their university entrance examinations. Literacy, numeracy, arts, music, and
drama skills are taught to students where schools cannot hire professional teachers for budget limitations. A decade ago, students from United States, serving and learning in Mexico, became the first teachers in an elementary school in an underserved community (Berry & Chisholm, 1999).

A second area where thousands of college students are offering substantial help is in the area of health care. While most students are not qualified or licensed to perform medical procedures, they are allowed to feed and bathe patients. Zoology students in American College in Madurai, India conduct immunization and blood donation camps for tribal people. In a medical school in Ecuador, students are responding to the request of a village to build a health clinic. Students are also helping in rehabilitation hospitals, physical therapy, and exercise clinics (Berry & Chisholm, 1999).

The third area where students are serving is in the areas of community development. The protection and training of women is a major activity in this area. College and university students are serving in programs of nutrition and prenatal care, parenting, day-care centers, and shelters for women and children who are victims of family violence.

Given the myriad social problems across the globe, a wide variety of service-learning programs are being offered at institutions of higher education. For example, students in a large Midwestern university partnered with a Kenyan university to address both environmental as well as social issues. In the “Experience Kenya” project, students helped protect the environment of a rural primary school through a tree-planting erosion-control project and provided labor to dig drainage systems and clean the grounds at a street children’s rehabilitation center. In addition to the manual labor, program participants
planned recreational activities for the children and helped prepare and serve meals (Cowan, Machacha, Hausafus, & Torrie, 2002).

**Faculty Motivation and Deterrents in Implementation of Service-learning**

A University of California-Berkeley study of the process of institutionalizing service-learning at 45 colleges and universities in the western United States found that the strongest predictor for institutionalizing service-learning on college campuses is faculty involvement in and support for service-learning (Furco, 2001). The study found that without the genuine support and involvement of a critical mass of faculty, service-learning is likely not to become institutionalized on a campus to any significant degree. Therefore, one of the first steps to advancing service-learning on any campus is to develop a critical mass of faculty who will support and promote its use. In order to do this, it is necessary to understand what motivates and deters faculty to service-learning, the roles of colleagues and peers in attracting faculty to service-learning, and the effect of the institutional reward system in engaging faculty to service-learning -- research areas where critical questions still remain to be answered (Driscoll, 2000).

Hammond (1994) surveyed 250 faculty members in 23 Michigan institutions of higher education who had incorporated service-learning into their courses. She focused on factors which motivated and encouraged or discouraged faculty trying to integrate service and academic study. The survey containing 24 possible motivations for adopting service-learning pedagogy, reported curricular outcomes such as bringing greater relevance to course material, encouraging self-directed learning, improving student satisfaction with education,
presenting disciplinary content material in an effective way, and providing an effective form of experiential education to be the strongest motivators.

Bringle et al. (1997) suggested faculty development and recruitment as motivators for engaging and sustaining faculty’s efforts in pursuing service-learning as pedagogy. According to the study, the early adopters of service-learning were predominantly visionary instructors with strong teaching and service orientations. They were risk takers and experimenters who were able to pursue service-learning with limited resources and minimal support. However, the current generation of faculty may have a different set of motivators for trying out service-learning. They are less idealistic and more pragmatic, and as such are more interested in service-learning’s concrete outcomes. The second generation of faculty may need more institutional support to sustain the development of service-learning. It has been suggested that faculty development efforts include engaging faculty in scholarship activities related to service-learning, providing leadership to other faculty, becoming role models for effective campus/community collaboration, advocating for the commitment of resources, and creating an atmosphere that encourages curricular innovation to support service-learning. The study also calls for institutional change to support service-learning and enhance university/community relationships. The Learn and Serve America: Higher Education Program reflects a similar belief that external support in the form of faculty training programs, course development stipends and incentives can play an important role in recruiting second generation faculty to experiment with service-learning (Bringle et al.).

Levine (1994) reported appropriate financial support for the development of courses and for attendance at conferences and professional meetings involving service-learning as
motivators for faculty involvement. The study elaborated on the importance of recognizing and appreciating faculty who successfully integrate service-learning in their courses.

Previous research efforts on satisfaction with service-learning cited three primary conditions for faculty satisfaction – namely sufficient freedom, autonomy, and control; the belief that the work itself had purpose and meaning; and feedback indicating their efforts were successful (Bess, 1982; Deci & Ryan, 1982; McKeachie, 1982). Hammond’s (1994) study validated past findings with an overall faculty satisfaction rate of 96%. Hesser (1995) found that more faculty embraced service-learning because they believed in active modes of learning and experiential education.

Abes, Jackson, and Jones (2002) investigated why faculty use or do not use service-learning in their courses. Department chairpersons and colleagues provided the strongest encouragement to faculty in implementing service-learning. Attendance in professional organizations/conferences and advice from colleagues provided helpful instructional support for service-learning faculty. Student learning outcomes provided the strongest motivation for utilizing service-learning. To a lesser extent, some faculty were also motivated by building university-community partnerships. The results indicated that it was important to involve community members and students in recruiting service-learning faculty. The advocacy strength of these two groups had not been emphasized previously. The study reported a lack of logistical support as the primary deterrents for service-learning use. Non service-learning faculty were deterred by issues concerning time, logistics, and a lack of compelling evidence that service-learning will increase student learning. The role of reward in encouraging faculty to implement service-learning was not compelling. This study will investigate possible factors that motivate and deter FCS faculty’s use of service-learning.
Teaching Perspectives in FCS

More than two decades ago, the predominant curriculum perspective in FCS underwent major changes and educators began adopting a new curriculum approach, the critical science perspective. Adopting a critical science approach to FCS curriculum was first suggested by Brown and Paolucci (1979) and Brown (1980), at the same time when alternative perspectives were first being explored for the field of curriculum development as a whole. There are primarily three curricular approaches used in FCS programs: the traditional, technical (concept-based) perspective; a competency-based perspective; and the critical science perspective. The technical approach focuses on a product in a teacher-centered classroom. Students listen to lectures, memorize facts, master skills, and take tests. Technical science, with its focus on “how to” questions, seeks to objectify and reduce human problems into manageable components and to find the most efficient means of developing in individuals the technical skills to solve these problems. A technical science approach to curriculum rejects the validity of any kind of knowledge other than what can be scientifically proven using objective definitions, observation, and measurement (Plihal et al., 1999).

The competency-based approach is used more often in occupational FCS (career oriented) programs and has become more prevalent in secondary schools because of the emphasis on school-to-work transitions and careers. Here, content is based on occupational competencies -- what the student must do successfully to function in specific occupations and in industry. Student performance objectives are specified in advance of instruction. Knowledge is arranged in terms of progressive steps to enable mastery of a skill. A criterion-referenced evaluation system is used to measure a student’s competency level. The emphasis
is placed on analyzing what persons actually do in particular job roles and hence, its prevalence in occupational FCS programs (Smith, 2004).

A critical science approach seeks to create a literate, democratic citizenry capable of self-governance and focuses on the questions of what knowledge is of most worth? and why? and what ought to be? (Plihal et al., 1999). It seeks to prepare individuals and families to examine personal and social problems, and to take reasoned and justifiable action. In critical science thinking, we examine and question ends as thoroughly and as continuously as we examine the means for achieving these ends. When examining and questioning valued ends, we must be able to reflect on and critically evaluate a number of positive alternatives, and then justify those ends we seek to achieve (and the means for achieving them) according to the overriding goals and values inherent in a social justice orientation. We must also be able to critically evaluate the implications and ramifications within personal, community, societal, and global contexts of both the ends and means.

**Historical Roots and Meaning of Critical Science and Modes of Rationality**

Critical science is different from other categories of science and yet is derived from them (Brown, 1984). The meaning of critical science is explored by placing it in the context of various forms of knowledge, the mode of rationality in each, and the uses of each form of knowledge. Brown argues that a critical science perspective is needed in FCS to better understand the relation between the socio-cultural world and the family. To comprehend critical science and to practice it wisely requires a distinct way of thinking and acting that is different from being passive recipients of information. Critical science is a complex concept. It is a mode of rationality in knowledge and action. The foundation of FCS is rooted in
practical science that is socially and morally oriented. The field aims at helping individuals help themselves, increasing their knowledge base, and expanding their informational map so that they can develop their own reflective capacities rather than having others help them or make decisions for them. The goal is to empower individuals by means of rational communication rather than manipulating their thought processes or physical environments. This can be achieved by following a critical science approach as opposed to a technical science approach. Critical science is the process, the course of action taken by individuals and groups to examine and critique present social structures for the purpose of their own emancipation. Critical theory is the outcome of the process, while critical science comprises the means toward that end. Habermas’s (1971) critical theory offered Brown an appropriate philosophical framework to guide the integration of theory and action in the practice of FCS.

Between 1930 and 1970, critical theory evolved from a study of the economic and political features of society toward cultural and ideological factors. At that time, philosophers from the Frankfurt School in Germany presented a new definition of theory. They added “what ought to be” to the more traditional focus on “what is” and “what can be” (Vincenti & Smith, 2004). They saw their conceptualization of theory as a form of resistance to unhealthy trends in contemporary society. These philosophers argued that the rationality of science and technology had become the dominant mode of reasoning, resulting in the belief that science and technology could solve all problems. This dominant form of reasoning allowed the mass media to promote a perception of good life based on access to material goods and power. In contrast, the German philosophers focused on promoting justice, equity, and human freedom (Bredo & Feinberg, 1982; Held, 1980).
Jurgen Habermas, one of the Frankfurt School’s prominent theorists, further developed the new philosophy building on the basic tenets of critical theory. He developed his vision of social evolution resulting from three types of action related to corresponding human interests in three types of knowledge (Habermas, 1971). They are 1) to produce what is needed for material existence through manipulation and control of objects, 2) to communicate with others through mutually understood symbols (which is language) within the context of traditions or rule-governed institutions of the culture, and 3) to free consciousness from its dependence on social forces that are repressive and distort communication. Knowledge is formed by humankind to enable them to engage in various activities in which it has interests. Thus, there is a relationship between knowledge and action. Each of the three general interests is pursued with a different mode of rationality through which reality comes to be understood and acted upon. It is not that each deals with a distinctly different sphere of reality; rather each provides a different viewpoint from which the nature and character of reality is disclosed to the person. These modes of rationality give rise to three sciences: the empirical-analytic sciences, the historical-hermeneutic or cultural sciences, and the critical sciences. However, choosing one mode of science does not imply undermining the others, but that it is most appropriate for understanding the phenomenon under question. Each type of rationality is equipped to logically deal with a specific set of concerns and not every possible concern.

**Technical rationality.** In technical rationality, the interest is to predict and control the external environment. The empirical-analytical sciences provide causal explanation of phenomena, which makes prediction and control possible. The language is artificial compared to ordinary language to minimize ambiguity. Due to emphasis on methodology, it
is possible to predict outcomes and reproduce results. The questions addressed and the organization of concepts resulting from inquiry are confined to description of phenomena, to cause and effect, and to the means of producing given ends. The terms of science are defined analytically and the language is artificial. In terms of the use of knowledge in practice, those who learn the mode of thinking and the content of any of the empirical and technical sciences, acquire means-ends skills for solving those problems concerned with how to produce a given result. They can monologically engage in technical activity to control their environment for such purposes as producing crops, making machinery, or preventing and curing disease. They learn a mode of reasoning or a way of thinking, which being value neutral, can be used for both good and bad purposes. There is no response in the empirical sciences which answers the question, “Which goals are most worthy” or “is X as a goal morally justifiable?” In technical science, there is no scope of comprehending human intentions or rational communication. It excludes the process of understanding oneself and correcting behavior through self-reflection and evaluation.

Hermeneutic rationality. Here, the interest is to understand other human beings based on norms of conduct of society. It is assumed that humans are social beings as much as they are a part of the natural world. One is concerned about others and survival in a socio-cultural world is dependent upon communication in ordinary language. Hermeneutic rationality investigates the meaning of a particular speech or action, and tries to discern the conceptual organization behind such speech or action. Interpretation is more than mere translation as the interpreter must go beneath the surface of actual speech or action, and strive to penetrate the implied meaning. Hermeneutic inquiry, therefore, involves exploring whether the individual’s claims are valid based upon judgment rooted in the norms and procedures for
validation available in the tradition of culture. The inquirer in hermeneutic science is not a neutral observer nor does the inquirer naively accept the claims made by an individual as necessarily valid. Instead, the interpreter assumes the role of a reflective partner in dialog, whose speech and actions are studied. Here, communication takes place in seeking mutual understanding and agreement on meanings, which enhance human life. Interpretative learning results in self-enlightenment and development of character with motivation to live by the norms of the communication. It is through communication where reason, not cause, is the concern in understanding why certain assertions of truth are made, certain norms and values are held right, certain meanings of linguistic expressions are adopted, and certain intentions are avowed. Changes in human behavior are the result of improved self-understanding which occur through rational communication in the socio-cultural world.

Emancipatory rationality. Here, the interest is to free individuals or groups from age-old repression and irrationalities in communication. In today’s society, often reflective and independent thoughts are discouraged, meanings are lost, and language is distorted. When society breaks down and language becomes deformed, claims and assertions are not rationally grounded, pseudo-communication exists, norms serve the interest of few and society is engulfed by conflict and contradiction. The critical science mode of thinking requires emancipatory rationality. The critical sciences are not distinguished from the other two categories of sciences, namely technical and hermeneutic, merely because they involve critical thinking. The critical sciences make use of hermeneutic dialog which Habermas has called “depth hermeneutics.” Criticism in the critical sciences involves self criticism made possible by critique of ideology, under conditions where irrationalities of communication exist. The purpose of such critique is emancipation from social forces of domination. Where
repressive social practices exist and lead to systematic distortions of moral systems of interaction, emancipation becomes the interest in moving beyond the structures of distorted communication.

The knowledge base of critical science is derived from the empirical-analytic and the hermeneutic sciences. Although it is essential to know the natural causes of physical development or human behavior, in doing so, the field of FCS must not over emphasize technical rationality. There is a need to reflect rationally and argue constructively the validation of claims. It is through hermeneutic rationality that professionals in the field can help people help themselves. Rational communication is warranted between professionals and the people they serve, to guide them according to their values and beliefs and not manipulate them via set norms of society. FCS education aids in acquiring the knowledge and reasoning skills needed to help resolve recurring concerns of the family. The critical science perspective in the FCS curriculum will help individuals develop abilities such as questioning assumptions, beliefs, and values; recognizing the value of different points of view; and articulating rational arguments (Vincenti & Smith, 2004). Questioning beliefs, values, and assumptions is essential to identifying problems when taken-for-granted actions lead to negative consequences for some or all of those affected.

Critical science would challenge students to look beyond the intended outcomes of an action to examine who is benefiting and who is not. Critical science based learning also fosters open dialogue where existing ideas and thoughts are challenged, their strengths and weaknesses revealed, and new ideas generated. In critical science thinking, learners would need not only to be able to question assumptions, and generate different alternatives, but also be able to come to a logical and ethical position and to articulate that position while in
critical conversation with others, based on honest, rational argument, and understanding rather than on power based compromises, political maneuvering, and created appearances (Vincenti & Smith, 2004).

The critical science perspective focuses on practical, recurring problems or concerns of the family (Brown & Paolucci, 1979). Recurring concerns are value-based problems that occur from generation to generation and are resolved through reflective judgment (Montgomery, 1999). To fully address recurring concerns of the family, multiple approaches may be required. Actions include those that are technical in nature (teaching how to make a product), as well as communicative (sharing meanings and beliefs) and emancipative (examining distorted ideas, beliefs, and power structures) (Brown & Paolucci, 1979). Smith (2004) conducted a study to determine the extent to which the critical science perspective was implemented in FCS secondary programs across the 50 states in the country. An informal survey of state supervisors of FCS programs revealed that the critical science perspective of curriculum development was being implemented in slightly less than half (44%) of the secondary classrooms in the states responding to the survey. A similar study has not been conducted to determine the implementation of critical science perspective in college level FCS courses. This study will explore if faculty members are employing a critical science mode of teaching in collegiate FCS courses.

Modes of Professional Practice

A conceptual pattern for theoretical discourse was established through the work of Brown and Paolucci (1979) and Brown (1980). FCS educators needed to identify ways to transform scholarly studies into meaningful practice. Subsequently, Wilson and Vaines (1985) conceptualized four distinct dimensions of FCS professional practice namely
customary practice, instrumental practice, interactive practice, and reflective practice. Each dimension had a different mode of inquiry, purpose of practice, pattern of action, and relationship between knowledge and action ultimately leading to different resolutions. Vaines (1997) further refined them to describe three modes of practice -- Technical-Rational, Reflective and No-choice. These theoretical frameworks were further refined and tested by Chatraphorn (1989), Ryu (1998), and Fox (2001).

According to Wilson and Vaines (1985), "practice forms the mediating link between the knowledge within a profession and the way that knowledge is integrated and translated for the benefit of society." After investigating the construct of professional practice, Vaines (1997) identified three different modes of professional teaching practices by describing the field of FCS as a vision of home -- Technical-Rational mode of practice, Reflective mode of practice, and the No-choice mode of practice. It was believed that through understanding the ideology of differing dimensions of professional practice, professional growth could be fostered both in terms of knowledge and its application (Fox, 2001). Clarifying the nature of practice would assist practitioners in fields such as nursing, social work, education, and family and consumer sciences in their efforts to improve the human condition within their respective field of socials concern (Wilson & Vaines, 1985).

**Technical-rational mode.** The Technical-Rational mode of practice views the world as a machine. It is assumed that professionals are justified in exerting power over those they seek to serve because they possess scientific knowledge as opposed to their clients or students (Vaines, 1997). This results in the teacher believing that it is his or her role to define for the student what the problem is, how the student should address it, and to assess the degree to which the student has correctly solved the problem. Students are viewed as
passive learners because they do not possess the correct knowledge and techniques that are scientific and standardized. The professional identifies reality as given and students must learn about it and adjust to it. When examined carefully, it becomes clear that the Technical-Rational mode of teaching practice inhibits moral action and is in opposition of an empowering profession.

**Reflective mode.** Reflective practice is grounded in a moral vision requiring professional commitment to creating a better world by honoring fairness, caring, and equity (Vaines, 1997). Embracing reflective practice is not just acquiring and utilizing new ideas and techniques, but becoming a person “choosing to make visible and open to examination all that one believes, knows, and does” (1997, p. 210). Reflective practitioners are engaged and ready to share by evolving, exploring, listening, struggling, and participating with others. They perceive others as a community of learners as opposed to passive students. Communication is important and engaging in dialogue provides a means for working together and growing to care for and appreciate different viewpoints. This togetherness improves classroom pedagogy, which connects learners and makes them active participants in the shaping of what they need and choose to learn and practice. The vision of reflective practice enables individuals and families to empower themselves, while seeking a common good for all living systems in socially responsible ways.

**No-choice practice.** This mode of practice involves those individuals who are not ready, willing, nor able to accept a philosophical position, but express a personal view of the profession. These members practice the profession as a personal mandate unfettered by the philosophical standards of a professional community.
For this review, no studies were found that examined FCS college faculty's teaching practices related to Vaines' Technical-Rational and Reflective mode of teaching practice. Only three studies could be located that investigated these teaching practices of FCS teachers in the K-12 setting. Chatraphorn (1989) examined learning styles and professional teaching practices of 320 Ohio vocational FCS teachers. More than half (53.9%) of the sample used reflective practice, while another one-fourth (25.4%) used interactive practice. She recommended further research on the professional teaching practice instrument including an item analysis and a critical analysis of the items of the instrument. Ryu (1998) studied the connection between professional teaching practice and curriculum orientation of home economics teachers and teacher educators in Korea. She used a 45-item modified professional teaching practice instrument. The majority of the Korean teachers (57.1%) used a customary instrumental practice, while 26% used reflective practice. Ryu recommended that factor analysis be used to shorten the instrument. She also recommended that the statements be examined and modified in order to reflect only one mode of professional teaching practice in each statement.

Fox (2001) investigated the dominant teaching practices of 327 Ohio Work and Family Life secondary teachers and teacher leaders. She modified the 45-item professional teaching practice instrument used by Ryu to 26 items, consisting of two major modes. Due to closeness in meaning and difficulty in distinguishing between the four modes of practice, customary and instrumental were combined to form the Technical-Rational mode of practice and items in the interpretive and reflective practices were combined to form the Reflective-Ethical mode of practice based on Vaines' (1997) delineation of two major modes of professional practices in FCS. Fox introduced a third subscale to the instrument measuring
process oriented practices of Ohio teachers. The new instrument was named the curriculum implementation scale (Fox, 2001). The majority of the Ohio Work and Family Life secondary teachers (69%) used a process oriented perspective with another 20% using the Technical-Rational perspective to teaching. Only 11% used a Reflective-Ethical perspective to teaching. Fox recommended further refinement of the curriculum implementation scale. She reported that the reliability of the three subscales was acceptable but further research was needed to improve and clarify the specific items of the instrument.

Teacher Efficacy

There is substantial variation in how teacher efficacy, as a construct, is defined and measured. Teacher efficacy is a self-perception, not an objective measure of teaching effectiveness. It represents teachers’ expectations that their efforts will bring about student learning. Ashton (1985) provided the commonly accepted definition of teacher efficacy: teachers’ “beliefs in their ability to have a positive effect on student learning” (p. 142). Most researchers distinguish two types of teacher efficacy, personal and general, following Ashton and Webb’s (1986) application of Bandura’s social cognitive theory.

The construct of teacher efficacy is derived from Bandura’s (1977, 1986, 1997) self-efficacy theory, which is a cognitive process that allows one to create “beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments” (Bandura, 1997, p.3). Bandura (1977) describes self-efficacy as a future oriented construct, that is based on self perception of one’s ability to organize and execute a course of action, and teacher efficacy shares that orientation. Teacher efficacy has been explained in several ways with Bandura defining it “as a type of self-efficacy—a cognitive
process in which people construct beliefs about their capacity to perform at a given level of competence” (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998, p.7). An important distinction must be made in that self-efficacy deals with self-perceptions of competence rather than the actual level of competence (Fox, 2001). People generally tend to underestimate or overestimate their actual abilities. Teachers with a high sense of efficacy tend to be more willing to experiment with new ideas to better meet the needs of their students (Tschannen-Moran, et al., 1998). Could teacher efficacy affect the degree to which faculty promote, teach, or practice service-learning in collegiate FCS courses?

The first type of teacher efficacy is personal teaching efficacy, which corresponds to Bandura’s (1997) construct of self-efficacy: “beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments” (p. 2). Individuals who believe that they will be successful on a given task are more likely to succeed because they adopt challenging goals, try harder to achieve them, persist despite setbacks, and develop coping mechanisms for managing their emotional states. Individuals, who believe they will fail, avoid expending effort because failure after trying hard threatens self-esteem. The second type is general teaching efficacy, which is the belief that teachers are able to bring about student learning despite out-of-school constraints.

The advent of the construct of teacher efficacy can be traced to the original RAND studies on effective schools conducted during the 1970s. Researchers decided to investigate teachers’ beliefs regarding their ability to affect student performance and learning, thus applying the theory of self-efficacy to the area of teaching. In 1976, two efficacy items were included in a survey conducted by the Rand Organization partially inspired by the social learning theory of Rotter (Tschannen-Moran, et al., 1998). The original items were
conceived as the extent to which teachers believed they could control students or whether the environment had greater influence. These two items looked at teacher’s personal sense of efficacy—"If I really try hard, I can get through to most students" and a more general sense of teacher efficacy based on the teacher’s perception of the ability of a teacher to reach students in spite of their environments—"...a teacher really can’t do much because most of a student’s motivation and performance depends on his or her home environment."

The significant relationships obtained with the two items led to the construct of teacher efficacy (Ashton & Webb, 1986). Teachers with higher confidence in their ability to teach are more likely to involve parents in school conferences, volunteering, and home monitoring (Garcia, 2004; Hoover-Dempsey, Bassler, & Brissie, 1987, 1992). Teachers with higher levels of efficacy also appear to exhibit more confidence in their classroom management techniques, use teaching techniques that are more challenging and difficult, and enhance student mastery of cognitive and affective goals (Ross, 1994, 1998). Additionally, teachers with higher efficacy are more likely to persist with the task at hand in spite of impediments (Ross, Cousins, Gadalla, & Hannay, 1999). The significant findings corroborated by these studies make the construct of teacher efficacy an important variable for predicting specific behaviors among educators.

**Personal Characteristics of FCS Faculty**

Robertson and Bean (1998) studied women faculty members in family and consumer sciences programs at land-grant universities. Of the 138 faculty in their study, 29% indicated their teaching content area was family studies and child development, 26% were in apparel
design, merchandising, or consumer studies, and 18% were in food and nutrition. Most of them (94%) were employed full time. Almost half (49%) of the respondents were between the ages of 40 and 49, 67% were married, and 79% indicated they had a doctoral degree. Two-thirds of the respondents (67%) indicated they held the rank of assistant or associate professor, 59% tenured, and another 29% on tenure track positions.

The majority (58%) of the faculty reported their major job responsibility was teaching, whereas 14% indicated their major job activity was research. Another 13% each were in administration and cooperative extension. Less than 3% of the respondents indicated they earned less than $25,000 per year, 17% indicated they earned between $25,000 and $29,999, whereas 27.5% indicated they earned between $30,000 and $44,999. More than half (52%) reported earning salaries of $45,000 or more.

Sullivan and Redick (1991) surveyed 227 vocational home economics teacher educators to represent the target population of 555 teacher educators and learn about their job satisfaction levels. The sample was randomly selected from The National Directory of Vocational Home Economics Teacher Educators and State Supervisors. They reported that 48% of the teachers were from public, non land-grant institutions, 95% were employed full time, almost all were female, and more than half were married. The average age was 49 years, 78% reported having a doctorate degree, 67% were associate or full professors, 69% were tenured, with average salaries ranging from $25,000 to $30,000.

Patel (2004) investigated personal and professional attributes of 126 educators in institutions of higher education that were members of the Campus Compact. A majority of the sample were white (86%) and the largest proportion was employed in the Midwest (34%). In regard to gender, 57% of the total sample were female and 39% male. The
service-learning faculty were evenly distributed by gender (48% females and 49% males).

For the non service-learning faculty, 70% were female and 28% male.
CHAPTER 3.

PROCEDURES AND METHODOLOGY

This chapter addresses the procedures and methodology used to examine the research questions of the study. The procedures are discussed in the following order: a) research questions b) research design, c) population and sample, d) instrumentation, e) data collection, f) data analysis, g) limitations. The sample was collected from the National Directory of the Family and Consumer Sciences Division of the Association for Career and Technical Education (2003-2004). This directory consisted of higher education institutions in the United States that have a family and consumer sciences teacher education program. Survey questionnaires were sent to a randomly chosen sample of FCS teaching faculty members in the institutions listed in the directory.

Research Questions

This research is intended to investigate if faculty believe that service-learning can be an effective pedagogy in FCS, faculty member’s dominant teaching perspective, their teaching efficacy levels and the factors that motivate or deter faculty in their use of service-learning.

The major research questions for this study are:

- What are the personal characteristics of collegiate FCS faculty who do and do not incorporate service-learning in their courses with respect to teaching content area, faculty rank, tenure status, number of years in college teaching, major professional
responsibilities held, number of service-learning courses taught, age, gender, and race.

- What are the teacher efficacy levels of collegiate FCS faculty who do and do not incorporate service-learning in their courses?
- What are the dominant teaching practices of collegiate FCS faculty who do and do not incorporate service-learning in their courses?
- What are collegiate FCS faculty members’ perceptions of service-learning as a value-added teaching practice for learning and teaching within FCS?
- What are the factors that motivate collegiate FCS faculty in implementing service-learning in their courses?
- What are the factors that deter collegiate FCS faculty in implementing service-learning in their courses?

Variables for this study include a) personal characteristics such as teaching content area, rank, tenure status, number of years of college teaching, major professional responsibilities held, number of service-learning courses taught, age, gender, and race, b) professional characteristics such as teacher efficacy and dominant teaching practice, c) perceptions about service-learning, and d) sources of motivation and deterrents in implementing service-learning (Table 3.1). The independent variable investigated for each of the research questions is group (service-learning and non service-learning faculty). The dependent variables are teacher efficacy, dominant teaching practice, perception about service-learning, and sources of motivation and deterrents.
Table 3.1. Variables

<table>
<thead>
<tr>
<th>Question</th>
<th>Grouping Variable</th>
<th>Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What are the personal characteristics of collegiate FCS faculty who do and do not incorporate service-learning in their courses?</td>
<td>Group: service-learning and non service-learning faculty</td>
<td>Teaching content area, rank, tenure status, major professional responsibilities held, number of years of college teaching, number of service-learning courses taught, age, gender, and race</td>
</tr>
<tr>
<td>2. What are the teacher efficacy levels of collegiate FCS faculty who do and do not incorporate service-learning in their courses?</td>
<td>Group: service-learning and non service-learning faculty</td>
<td>Teacher efficacy</td>
</tr>
<tr>
<td>3. What are the dominant teaching practices of collegiate FCS faculty who do and do not incorporate service-learning in their courses?</td>
<td>Group: service-learning and non service-learning faculty</td>
<td>Dominant teaching practice</td>
</tr>
<tr>
<td>4. What are collegiate FCS faculty members’ perceptions of service-learning as a value-added teaching practice for learning and teaching within FCS?</td>
<td>Group: service-learning and non service-learning faculty</td>
<td>Perception about service-learning</td>
</tr>
<tr>
<td>5. What are the factors that motivate collegiate FCS faculty in implementing service-learning in their courses?</td>
<td>FCS service-learning faculty</td>
<td>Sources of motivation</td>
</tr>
<tr>
<td>6. What are the factors that deter collegiate FCS faculty in implementing service-learning in their courses?</td>
<td>FCS non service-learning faculty</td>
<td>Deterrents</td>
</tr>
</tbody>
</table>

Research Design

The study uses a cross-sectional survey research design to investigate the research questions. Survey research designs are procedures in quantitative research in which investigators administer a survey to a sample or to the entire population of people in order to describe the attitudes, opinions, behaviors, or characteristics of the population (Creswell, 2002). Data were
collected by an electronic survey and statistically analyzed by testing research questions and describing trends about responses to questions. Appropriate permission was obtained from the institution’s human subjects review board to conduct the study (Appendix B).

**Population and Sample**

The population consisted of all FCS teaching faculty members in institutions of higher education in the United States. The sampling frame or the target population consisted of all FCS teaching faculty members in the higher education institutions listed in the National Directory of the Family and Consumer Sciences Division of the Association for Career and Technical Education (2003-2004) that had an FCS teacher education program. An electronic survey was sent to a list of teaching faculty members chosen randomly in the institutions listed in the National Directory (Appendix A). Random sampling ensured that the sample exhibited similar characteristics of the population and inferences could be generalized.

**Instrumentation**

**Personal Characteristics Survey**

Personal characteristics of FCS college faculty were determined by a researcher-developed questionnaire. The survey contained nine questions pertaining to faculty’s (1) teaching content area, (2) rank, (3) tenure status, (4) number of years in college teaching, (5) major professional responsibilities held in terms of teaching, research, advising, and service, (6) number of service-learning courses taught, (7) age, (8) gender, and (9) race. The
instrument was pilot tested by a faculty panel and revised, based on their comments and
feedback.

**The Ohio State Teacher Efficacy Scale (OSTES)**

**Origin.** The instrument used to measure teacher efficacy is the Ohio State Teacher
Efficacy Scale (OSTES) developed by Tschannen-Moran and Hoy (2001). A teacher
efficacy scale was utilized rather than a self-efficacy scale, because the purpose of this study
is to understand the subject as an educator. Pajares (1996) supports the need to assess
efficacy at a specific as opposed to a general level, “when efficacy beliefs are globally
assessed and/or do not correspond with the criterial tasks with which they are compared, their
predictive value is diminished or can even be nullified; and when efficacy assessments are
tailored to the criterial tasks prediction is enhanced” (p. 557). Thus, for psychometric
reasons, a specific teacher-efficacy scale was utilized.

**Validity and reliability.** The OSTES is based on Bandura’s scale (1977, 1986, 1997).
The three efficacy factors for the OSTES measure a teacher’s sense of efficacy regarding
instructional strategies, classroom management, and student engagement. OSTES was
examined in three separate studies. In the first study, the original 52 items were reduced to
32 and in the second, the scale was further reduced to 18 items that formed three subscales.
In the third study, 18 additional items were developed and tested. The final instrument had
two forms, a long form with 24 items and a short form with 12 items. Factor structure,
reliability, and validity of the new measures were examined, along with the appropriateness
of the new scale for both pre-service and in-service teacher populations. The reliabilities for
the long and short forms were .94 and .90 respectively. In the short form, all items loaded on
one factor with loadings ranging from .49 to .75.
Construct validity was examined by assessing the correlation of this new measure with other existing measures of teacher efficacy. The results indicated that the OSTES (both long and short form) could be considered a valid instrument (Tschannen-Moran & Hoy, 2001). This teacher efficacy measure is stable psychometrically unlike previous teacher efficacy scales.

A few modifications were made to the instrument due to the differences in the responding population, from teachers in public schools to faculty in higher education. The word “children” was replaced with the word “students.” Items 2 and 3 of the short form were replaced by items 2, 3, and 12 from the long form. The slightly modified scale had a high reliability score of .91. Factor analysis was performed using the principal component analysis (PCA) and Kaiser criterion (factors with eigenvalues ≤ 1 are retained). All 13 items loaded on one factor with factor loadings ranging from .774 to .608 and accounting for 49% of the variance in the respondents’ scores. The results showed that the slightly modified teacher efficacy instrument had similar reliability and validity statistics compared to the short and long form of the OSTES instrument.

Tschannen-Moran and Hoy (2001) reviewed the findings on the connections between teachers with a strong sense of efficacy and a “tendency to exhibit higher levels of planning and organization, openness to new ideas and new teaching methods, lower frequency in criticism of students, enthusiasm and commitment to teaching” (p. 784). A high score on the scale conveyed the faculty’s perception of impact, specifically, if they feel they can make a difference on three dimensions of teacher efficacy namely, instructional strategies, student engagement, and classroom management. A main learning objective for service-learning is for students to realize the realities (i.e., social injustices) of society. Thus, high scorers on
this inventory can be interpreted as educators who believe they play a significant role in the formation of students' perception of the critical issues of contemporary society (Patel, 2004). Assessing efficacy can provide an understanding of the faculty member's personality as a whole, because of the strong empirical link between efficacy and other personality traits such as locus of control, personal responsibility, and persistence (Gibson & Dembo, 1984, p. 572).

**Scoring.** Respondents were asked to rate how much of a personal difference they could make in everyday school-related challenges using the 9-point Likert-type scale that ranges from 1 = not at all, 3 = very little, 5 = somewhat, 7 = quite a bit, and 9 = a great deal (Tschannen-Moran & Hoy, 2001). Responses ranged from a high score of 9 indicating that teachers believed they could accomplish "a great deal" to a low score of 1 indicating that the teachers believed they could do "nothing." A mid-range score of 5 indicated that the teachers believed they could do "some" when asked "how much can you do?" Summing the total number of points from 9 to 1 for each of the 13 questions was the scoring procedure for the OSTES instrument used in this study. The scores could range from 13, indicating the lowest level of efficacy, to 117, the highest level of efficacy. When the total score was divided by the 13 items, a mean score ranging from the lowest teacher efficacy score of 1 to the highest teacher efficacy score of 9 was obtained. Mean scores of 7-9 were considered high teacher efficacy, 5 was average, and scores of 1-3 considered low teacher efficacy.

**FCS Curriculum Implementation Scale (FCSCI)**

**Origin.** A slightly modified FCS curriculum implementation scale was used to measure faculty's dominant teaching practice. This instrument indicates if faculty stayed with the more traditional technically oriented curriculum perspective or if faculty have been using the Reflective-Ethical based curriculum perspective. The FCS curriculum
implementation scale was developed and modified by Janet Laster at Ohio State University. The instrument used in this study was adapted from items developed by Laster and used by Chatraphorn (1989), modified by Laster and tested by Ryu (1998), and modified again and tested by Fox (2001). The original items created by Laster were based on Wilson and Vaines’ (1985) theoretical framework of professional teaching practices and consisted of 18 items with four separate classroom scenarios describing classroom actions that represented each of four dimensions of professional teaching practice: (a) customary, (b) instrumental, (c) interactive, and (d) reflective. A different mode of inquiry, thinking, and action was reflected for each dimension, leading to different resolutions or modes of professional practice (Wilson & Vaines, 1985). The customary and instrumental dimensions of professional teaching practice were representative of the technical system of action, the interactive dimension of professional teaching practice was representative of the interpretive or hermeneutic system of action, and the reflective dimension of professional teaching practice was representative of the emancipatory system of action. No other instrument measuring professional teaching practices in family and consumer sciences curriculum could be located.

Chatraphorn’s (1989) original 18-item scale was further simplified by Ryu (1998). A factor analysis of responses from 37 Ohio family and consumer sciences teachers permitted the scale to be further reduced to 45 items (Ryu, 1998). The 45-item revised instrument consisted of 10 items for customary practice, 7 items for instrumental practice, 12 items for interactive (hermeneutic) practice, and 16 items for reflective (emancipatory) practice. To balance out the subscale item numbers for analysis purposes, the customary and instrumental practice items were collapsed into one subscale called the customary-instrumental practice, representing the technical-rational mode of practice described by Vaines (1997). Because of
the closeness in meaning and the difficulty in distinguishing between interactive (hermeneutic) and reflective practices, the two types of teaching practices are sometimes collapsed into one group (Fox, 2001).

Vaines (1997) delineated only two major acceptable modes of professional practice for family and consumer sciences educators: Technical-Rational and Reflective-Ethical. Based on Vaines’ (1997) theoretical framework, Fox (2001) combined the interactive and reflective practice items of Ryu (1998) into one Reflective-Ethical subscale. Vaines (1997), however, categorized a third mode of professional practice as “No-Choice” because she believed it represented practitioners who were not ready or willing to commit to a philosophical position but expressed a personal view of the profession.

Based on Fox’s revision (2001), the curriculum implementation instrument used in this study has two subscales. The Technical-Rational (previously called customary-instrumental) subscale and the Reflective-Ethical (previously called interactive and reflective) subscale each containing 9 items. The Technical-Rational subscale consists of items 2, 5, 7, 11, 13, 14, 15, 17, and 18. The Reflective-Ethical subscale consists of items 1, 3, 4, 6, 8, 9, 10, 12, and 16. These items were selected by Fox (2001) as they had factor loadings between .84 and .53 in previous testings.

Scoring. The original 45-item scale developed by Ryu (1998) and used in this study has a 5-point Likert scale with 1 = this is seldom like me, 2 = this is occasionally like me, 3 = this is like me about half of the time, 4 = this is like me a good deal of the time, and 5 = this is like me most of the time. Scores are summed for each of the subscales. A total score was obtained on each of the two subscales with scores then divided by the number of items in the subscale to determine a mean score. For the Technical-Rational subscale, a mean score of
less than 3 is considered low implementation of a Technical-Rational curriculum philosophy while a score over 3 was considered high implementation. Similarly, a mean score of less than 3 was considered low implementation of a Reflective-Ethical curriculum philosophy while a score over 3 was considered high implementation.

Validity. A panel of critical science theory experts analyzed the original instrument to determine the content validity (Chatraphorn, 1989). The panel examined the items to ascertain if the items were consistent with the theoretical framework proposed by Wilson and Vaines (1985). Laster reviewed each item in the reduced 45-item scale (Ryu, 1998) to determine if they represented the dimensions of professional teaching practice in a factor analysis. Fox (2001) reduced the scale further to 18 items and the factor loadings of this condensed scale ranged between .84 and .53. These values were deemed acceptable (Fox, 2001).

In the current study, factor analysis was done using the principal components analysis and Kaiser criterion (factors with eigenvalues ≤ 1 are retained). All nine items of the Reflective-Ethical subscale loaded on one factor with loadings ranging between .75 and .47. Six items in the Technical-Rational scale loaded on one factor with loadings ranging from .64 to .53. Items 2 and 14 loaded on a second (.48) and third factor (.59) respectively. Item 15 loaded (.49) with the Reflective-Ethical items. Previous studies tested this instrument on K-12 teachers although the current study surveyed college faculty. The attitudinal difference between K-12 teachers, and faculty members in higher education may have been reflected in the factor analysis results. Therefore, for the purpose of this study, mean scores for the Technical-Rational subscale were computed for the 6 items that loaded on the first factor, while deleting the scores for items 2, 14, and 15.
Reliability. Using data from 37 Ohio home economics teachers, Ryu (1998) calculated Cronbach's alpha coefficient for the 45-item instrument. The coefficients were .804 for customary practice, .719 for instrumental practice, .871 for interactive practice, and .935 for reflective practice. All reliability scores were deemed acceptable (Ryu, 1998). Fox (2001) conducted a field test by 10 Ohio work and family life teachers using a revised version of the Ryu (1998) instrument. Comments from the field test led to further revision of the instrument to the current 18 items. Cronbach’s alpha for the Technical-Rational scale was .78 and for the Reflective-Ethical scale was .84 indicating that the two subscales were reliable (Fox, 2001). In this study the Cronbach’s alpha was .72 and .86 for the Technical-Rational and Reflective-Ethical scales respectively.

Faculty Perception Survey (FPS)

The faculty perception measure is a researcher developed instrument. This instrument gauged faculty's perception whether service-learning could be a value-added curriculum strategy for learning and teaching within FCS.

Scoring. The faculty perception measure consisted of 25 items. Nineteen items represented a single construct, namely perception about whether service-learning could be used as an effective pedagogy in FCS. The remaining 6 items were designed specifically to avoid response set bias. They did not measure perception about the precise construct under investigation. These items were reverse coded for analysis. Respondents were asked to rate their perception on a scale of 1 to 7 with 1 = strongly disagree, 2 = moderately disagree, 3 = slightly disagree, 4 = uncertain, 5 = slightly agree, 6 = moderately agree, and 7 = strongly agree. A mean score was obtained by summing the scores of the 19 items measuring the particular construct under question and dividing by 19.
Validity. Items were developed after consulting several books and articles on service-learning. Of particular importance was Eyler, Giles, & Schmiede’s (1996) *A practitioner’s guide to reflection in service-learning: Student voices and reflections*. Items were developed with emphasis on faculty’s perception about how service-learning can help learners understand critical problems facing society, aid in instilling responsibility, and help in empowering students, all of which are critical objectives for FCS education. A panel of FCS faculty, who had implemented service-learning in their courses, analyzed the items to determine content validity. The panel examined the items to ascertain if they were consistent with the theoretical underpinnings and findings of service-learning pedagogy. The resulting measure was pilot tested with 38 FCS faculty at a large Midwestern university. Based on their feedback, several items were fine-tuned and the wording of other items was modified. Due to a low response rate, factor analysis was not a feasible option with the pilot data.

Factor analysis of the 25-item scale with 375 survey respondents yielded positive results. Principal components analysis with Kaiser normalization yielded 2 factors accounting for 56% of the variance in the respondents’ scores. All 19 items measuring faculty’s perception loaded on one factor. The factor loadings ranged from .89 to .65. The remaining 6 items included to avoid response set bias loaded on a second factor with loadings between .68 to .45.

Reliability. Cronbach’s alpha for the entire 25-item measure was .91. Without the reversely coded items, Cronbach’s alpha was .96. The results of these analyses provide strong evidence for the reliability and validity of the faculty perception scale used in this study.
Faculty Motivation Survey (FMDUSL)

The instrument used to determine FCS faculty’s motivation and possible deterents to incorporate service-learning in their teaching was assessed by the administration of a slightly shorter version of the Faculty Motivation and Deterrents for the Use of Service-Learning survey developed by Abes, Jackson, and Jones (2002). Abes et al. designed the survey questionnaire to gather information about factors that motivate and deter faculty use of service-learning. In order to maximize reliability and validity, a panel of experts at the researchers’ home institution pilot tested the survey. Based on the panel’s responses and feedback, the survey was modified to its final form (Abes et al., 2002).

Scoring. The survey contained both closed and open-ended questions with a definition of service-learning provided in the survey. Using the definition of service-learning as a guideline, respondents were asked if they currently or in the past taught a course that included a service-learning component. Based on their response (yes or no), respondents were categorized into service-learning or non service-learning faculty, and directed to two different sets of questions designed specifically for the two groups. Questions 2 through 8 were responded by service-learning faculty. Non service-learning faculty were directed to question 9.

Question 2 on importance of encouragement for service-learning was measured using a Likert scale with 1 = not important, 2 = somewhat important, 3 = important, 4 = very important. Helpfulness of instructional support for the use of service-learning was measured similarly using a Likert scale with 1 = not helpful, 2 = somewhat helpful, 3 = helpful, 4 = very helpful. Next, respondents were asked to rate the importance of student-learning outcomes and community-based outcomes in their decision to use service-learning on a Likert scale with 1 = not important, 2 = somewhat important, 3 = important, 4 = very important. Question 5 listed 15 outcomes that
might have motivated faculty to use service-learning. Respondents were asked to choose no more than three most important outcomes that influenced their decision. Space was provided for respondents to include additional outcomes. The complete list included items related to student learning outcomes (7 items), community outcomes (5 items), and professional responsibilities (3 items). Mean frequencies were used because there was an unequal number of items in each grouping. Mean frequency for student outcomes was measured by adding the total number of responses in each of the seven items and dividing by 7. Similarly, mean frequency for community outcomes was measured by adding the total number of responses in each of the five items and dividing by 5. Mean frequency related to professional responsibility was computed similarly.

Likelihood of faculty to continue with service-learning was measured using a Likert scale with 1 = very likely, 2 = likely, 3 = neither likely nor unlikely, 4 = unlikely, 5 = very unlikely. Service-learning faculty were asked what, if any, concerns might cause them not to continue to incorporate service-learning in their teaching, or to do so less frequently. Respondents were asked to choose no more than three deterrents from a list of nine potential deterrents. Space was provided to write about additional potential deterrents. The potential deterrents included items related to time, logistics, and funding (3 items); student and community outcomes (2 items); reward structure (1 item); and comfort with ability to effectively use service-learning (3 items). Mean frequencies were used because there were unequal number of items in each grouping. Mean frequency for concerns related to time, logistics, and funding was measured by adding the total number of responses in each of the three items and dividing by 3. Similarly, mean frequency for concerns related to student and community outcomes was measured by adding the total number of responses in the two items and dividing by 2. Mean frequency for reward
structure and ability to use service-learning was computed similarly. Faculty members were asked to rate importance of reward structure in their efforts to use service-learning in a Likert scale with 1 = not important, 2 = somewhat important, 3 = important, 4 = very important.

On a five-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, and 5 = strongly agree), non service-learning faculty were asked to indicate for each of the 19 potential deterrents, the extent to which each item contributed to their decision to not use service-learning. Space was provided to write about additional deterrents. The deterrents listed were grouped into four categories namely, time, logistics and funding concerns; curricular and pedagogical concerns; institutional and professional concerns; and student and community outcomes. Likelihood of non service-learning faculty to incorporate service-learning was measured using a Likert scale with 1 = very unlikely, 2 = unlikely, 3 = I am unsure, 4 = likely, 5 = very likely.

**Data Collection**

Data were collected by sending an electronic survey (e-survey) via email to survey respondents. For descriptive research, the general guideline for a sample size was 10-20% of the population (Gay, 1996). Specifically, Gay suggested a sample size of 288 for a population of 1000. Taking into account that faculty response rates to e-surveys ranged between 20-30% (Bosnjak & Tuten, 2001), invitations to participate were sent to 1662 faculty members in order to obtain a sample size of at least 300. Both timing and technique can affect response rates in electronic surveys and some of the most well-documented methods included the use of a pre-contact and reminder letter as well as the use of incentives, personalization, and sponsorship (Kanuk & Berenson, 1975; Ratneshwar & Stewart, 1990).
Dillman (2000) recommended avoiding graphically-complex or fancy design options. He compared elaborate versus plain designs and found higher quit rates when elaborate designs were used. This was likely due to the corresponding increase in download time for pages with complex designs. Frick, Bachtinger, and Reips (1999) conducted an experiment on the effect of incentives on response. They concluded that the chance to win prizes in a lottery resulted in lower drop-out rates than in those conditions where no prize drawing entry was offered as an incentive. Procedures outlined by web survey experts to increase response rates substantially were employed.

A google search (www.google.com) was done on the Internet to locate the website of each institution listed in the National Directory of the Family and Consumer Sciences Division of the Association for Career and Technical Education (2003-2004). Thereafter, faculty emails were retrieved from the family and consumer sciences/human sciences college or department webpage. An introductory email was sent to a randomly chosen sample of FCS/human sciences faculty members in those institutions informing them they had been selected to participate in the study. A brief overview of the intended research was provided along with a note detailing significance of the study. Participants were asked to notify if they were not holding a teaching responsibility at the current time. Based on their responses, faculty members who held 100% research, advising, extension, and administrative positions were removed from the sample list.

A cover letter (appendix C) and a letter of informed consent (appendix B) were sent via email to all participants with a brief overview of the purpose of the study, its significance, and a hyperlink to access the survey (appendix A). Two reminder emails were sent to non-respondents after a week's interval (appendix C). The responses were entered electronically
in a data file after the participants submitted the survey by clicking on the “submit” button at the end of the survey. As an incentive, respondents were informed that after completion of survey, their names would be included in a lottery for eight $25 gift certificates from Amazon.com. The lottery winners were notified by email and accordingly, the gift certificates were distributed.

A total of 1662 introductory emails were sent out. After removing faculty members who did not have any current teaching responsibilities and undeliverable email messages, the sample consisted of 1440 respondents. The data file recorded 181 responses after the first mailing. Another 112 responded after the first reminder was sent. Another 82 participants responded after the second reminder. A total of 375 responses were recorded. The response rate was 26.1%, consistent with previous response rates of web surveys. Copies of introductory email, cover letter, and reminder email are provided in Appendix C.

Table 3.2. Sample and response rate

<table>
<thead>
<tr>
<th>Mailing</th>
<th>Response (n)</th>
<th>Response Rate</th>
<th>Date of Mailing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invited sample</td>
<td>1662</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usable sample</td>
<td>1440</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st mailing</td>
<td>181</td>
<td>12.6 %</td>
<td>4-20-2005</td>
</tr>
<tr>
<td>1st reminder mail</td>
<td>112</td>
<td>8.9 %</td>
<td>5-02-2005</td>
</tr>
<tr>
<td>2nd reminder mail</td>
<td>82</td>
<td>7.2 %</td>
<td>5-09-2005</td>
</tr>
<tr>
<td>Total Responses = 375</td>
<td></td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Response Rate = 26.1%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data Analysis

Data were analyzed using SPSS version 13.0 (www.spss.com). The nature of the research question and the measurement of the variable determined the types of statistical tests
used. The null hypothesis was tested at an alpha level of .05. Descriptive statistics including frequencies, means, and standard deviations were computed for the variables of interest. Frequencies were computed for nominal variables such as teaching content area, rank, tenure status, major professional responsibility held, gender, race, service-learning motivators and deterrents while measures of central tendency were computed for ordinal and interval variables.

Ordinal variables such as age, teacher efficacy, dominant teaching practice, and perception about service-learning were entered as ranks beginning with 1 as the lowest level and then descriptive statistics were computed. Interval variables such as number of years of college teaching were evaluated using frequencies, means, standard deviations, and variances.

Limitations

The design of the study was survey research, using a self-reporting questionnaire, and thus could be subject to the weaknesses related to survey research using self-report of practice. Responses were limited to the honesty and accuracy with which respondents completed the questionnaires. In addition, faculty concerns for self-representation may have influenced their responses about teacher efficacy and dominant teaching perspectives as based on their interpretation of these constructs.

Although a definition of service-learning was provided in the instrument, not all respondents interpreted the definition in the same way. Therefore, some respondents who were considered service-learning faculty might not have actually used service-learning as intended by the definition. Instead, they might have included in their courses student
teaching, internships, and clinical experiences. Finally, the response rate of 26.1% while similar to most web surveys may have provided an overestimate of scores when generalized to the total population of FCS faculty members.
<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Variables</th>
<th>Instrument</th>
<th>Data</th>
<th>Type of Data</th>
<th>Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What are the personal characteristics of collegiate FCS faculty who do and do not incorporate service-learning in their courses?</td>
<td>Group (SL and non SL Faculty)</td>
<td>Personal Characteristics Survey</td>
<td>Categories</td>
<td>Nominal, Ordinal, and Interval</td>
<td>Frequency, Mean, Standard Deviation, Variance</td>
</tr>
<tr>
<td></td>
<td>DV: Teaching content area, rank, tenure status, years of college teaching, number of service-learning courses taught, age, race, and gender.</td>
<td></td>
<td>Rank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. What are the teacher efficacy levels of collegiate FCS faculty who do and do not incorporate service-learning in their courses?</td>
<td>Group (SL and non SL Faculty)</td>
<td>Ohio State Teacher Efficacy Scale (OSTES)</td>
<td>9 = A great deal</td>
<td>Interval</td>
<td>Frequency, Mean, Standard Deviation, Variance, t-test, ANOVA</td>
</tr>
<tr>
<td></td>
<td>DV: Teacher efficacy</td>
<td>1 = None at all</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. What are the dominant teaching practices of collegiate FCS faculty who do and do not incorporate service-learning in their courses?</td>
<td>Group (SL and non SL Faculty)</td>
<td>FCS Curriculum Implementation Scale (FCSCI)</td>
<td>5 = Most of the time</td>
<td>Interval</td>
<td>Frequency, Mean, Standard Deviation, Variance, t-test, ANOVA</td>
</tr>
<tr>
<td></td>
<td>DV: Dominant teaching practice (Technical-Rational items – 2, 5, 7, 11, 13, 14, 15, 17, 18 Reflective-Ethical items – 1, 3, 4, 6, 8, 9, 10, 12, 16)</td>
<td>1 = Seldom</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. What are collegiate FCS faculty members’ perceptions of service-learning as a value-added teaching practice for learning and teaching within FCS?</td>
<td>Group (SL and non SL Faculty)</td>
<td>Faculty Perception Survey (FPS)</td>
<td>7 = Strongly Agree</td>
<td>Interval</td>
<td>Frequency, Mean, Standard Deviation, Variance, ANOVA</td>
</tr>
<tr>
<td></td>
<td>DV: Faculty perception</td>
<td>1 = Strongly Disagree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. What are the factors that motivate collegiate FCS faculty in implementing service-learning in courses?</td>
<td>Group (SL and non SL Faculty)</td>
<td>Faculty Motivation and Deterrents for the Use of Service-Learning (FMDUSL)</td>
<td>Categories</td>
<td>Nominal, Ordinal, and Interval</td>
<td>Frequency, Mean, Standard Deviation, Variance, ANOVA, Crosstabulation</td>
</tr>
<tr>
<td></td>
<td>DV: Sources of motivation to implement SL</td>
<td>Rank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. What are the factors that deter collegiate FCS faculty in implementing service-learning in courses?</td>
<td>Group (SL and non SL Faculty)</td>
<td>Faculty Motivation and Deterrents for the Use of Service-Learning (FMDUSL)</td>
<td>Categories</td>
<td>Nominal, Ordinal, and Interval</td>
<td>Frequency, Mean, Standard Deviation, Variance, ANOVA, Crosstabulation</td>
</tr>
<tr>
<td></td>
<td>DV: Factors that discourage use of SL</td>
<td>Rank</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. Dependent variable = DV, Service-learning = SL*
CHAPTER 4.
FINDINGS AND DISCUSSION

This chapter presents the findings of this study. The first section describes the personal characteristics of FCS faculty, differentiated by service-learning and non service-learning faculty. The second section examines teacher efficacy. The third section discusses faculty’s dominant mode of teaching practice. The fourth section reports faculty member’s perception of service-learning as a teaching strategy in FCS. Findings on sources of motivation and deterrents in implementing service-learning in FCS courses are reported and discussed in the last section.

Personal characteristics were determined from the Personal Characteristics Survey, developed by the researcher. Professional characteristics, namely teacher efficacy was measured by the Ohio State Teacher Efficacy Scale (OSTES) developed by Tschannen-Moran and Hoy (2001). Faculty’s dominant mode of teaching practice was determined by scores on the FCS Curriculum Implementation Scale (FCSCI) originally developed by Laster and used by Chatraphorn (1989), later modified by Laster and used by Ryu (1998) and modified again by Fox (2001). The faculty perception survey (FPS), a researcher-developed instrument was used to measure faculty’s perceptions about service-learning as a value-added teaching strategy in FCS. The Faculty Motivation and Deterrents for the Use of Service-Learning (FMDUSL) instrument developed by Abes, Jackson, and Jones (2002) was used to determine the sources of motivation, encouragement, and deterrents in incorporating service-learning in FCS courses.
The study used descriptive statistics (frequency, mean, standard deviation, and variance), independent sample t-test, and analysis of variance to test the research questions. Procedures for survey research design were employed to develop and administer a web survey to a random sample of FCS faculty members. The findings for this study were based on the analysis of data received from 375 FCS teaching faculty members in institutions of higher education in the United States that had an FCS teacher education program.

For questions on personal characteristics, teacher efficacy, dominant teaching practice, perception about service-learning, and motivation on using service-learning, service-learning faculty were defined as those who answered “yes” to the question “do you currently teach or have you ever taught a course that included a service-learning component?” Fifty-nine percent of the sample (n = 216) answered affirmatively to the above question and were labeled service-learning faculty. Forty-one percent (n = 152) indicated they did not and were designated non service-learning faculty.

Research Question 1: Personal Characteristics of FCS Faculty

Data from the Personal Characteristics Survey instrument were used to answer research question 1: What are the personal characteristics of collegiate FCS faculty who do and do not incorporate service-learning in their courses? Characteristics presented in this section include faculty member’s teaching content area, rank, tenure status, number of years of college teaching, major professional responsibilities held, number of service-learning courses taught, age, gender, and race. Service-learning faculty were those who had taught a course that included a service-learning component. Non service-learning faculty had never taught a course that incorporated service-learning.
Table 4.1. Personal characteristics of FCS collegiate faculty

<table>
<thead>
<tr>
<th>Personal Characteristics</th>
<th>Total</th>
<th>Service-Learning Faculty</th>
<th>Non Service-Learning Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teaching Content Area</strong></td>
<td>N = 373</td>
<td>n = 216</td>
<td>n = 149</td>
</tr>
<tr>
<td>Apparel &amp; Textiles</td>
<td>25</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Human Development</td>
<td>102</td>
<td>65</td>
<td>34</td>
</tr>
<tr>
<td>Consumer Resource</td>
<td>27</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>FCS Education</td>
<td>45</td>
<td>27</td>
<td>17</td>
</tr>
<tr>
<td>Family Studies</td>
<td>51</td>
<td>33</td>
<td>16</td>
</tr>
<tr>
<td>Fashion Merchandising</td>
<td>24</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Food Science &amp; Human</td>
<td>63</td>
<td>37</td>
<td>26</td>
</tr>
<tr>
<td>Nutrition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Services Production</td>
<td>17</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>&amp; Hospitality Management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td>6</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Interior Design</td>
<td>10</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>35</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td><strong>Rank</strong></td>
<td>N = 372</td>
<td>n = 215</td>
<td>n = 150</td>
</tr>
<tr>
<td>Full Professor</td>
<td>75</td>
<td>47</td>
<td>24</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>108</td>
<td>59</td>
<td>48</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>124</td>
<td>71</td>
<td>53</td>
</tr>
<tr>
<td>Lecturer</td>
<td>20</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Instructor</td>
<td>45</td>
<td>26</td>
<td>18</td>
</tr>
<tr>
<td><strong>Tenure Status</strong></td>
<td>N = 372</td>
<td>n = 215</td>
<td>n = 149</td>
</tr>
<tr>
<td>Tenured</td>
<td>190</td>
<td>113</td>
<td>71</td>
</tr>
<tr>
<td>On Tenure Track</td>
<td>107</td>
<td>56</td>
<td>51</td>
</tr>
<tr>
<td>Not Tenured</td>
<td>75</td>
<td>46</td>
<td>27</td>
</tr>
<tr>
<td><strong>Years of College Teaching</strong></td>
<td>N = 371</td>
<td>n = 214</td>
<td>n = 149</td>
</tr>
<tr>
<td>1-5</td>
<td>96</td>
<td>49</td>
<td>46</td>
</tr>
<tr>
<td>6-10</td>
<td>74</td>
<td>43</td>
<td>30</td>
</tr>
<tr>
<td>11-20</td>
<td>94</td>
<td>62</td>
<td>30</td>
</tr>
<tr>
<td>21-30</td>
<td>79</td>
<td>44</td>
<td>33</td>
</tr>
<tr>
<td>31-50</td>
<td>28</td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td><strong># of Service-Learning Courses Taught</strong></td>
<td>N = 372</td>
<td>n = 216</td>
<td>n</td>
</tr>
<tr>
<td>1-2</td>
<td>139</td>
<td>139</td>
<td>-</td>
</tr>
<tr>
<td>3-5</td>
<td>52</td>
<td>52</td>
<td>-</td>
</tr>
<tr>
<td>More than 5</td>
<td>25</td>
<td>25</td>
<td>-</td>
</tr>
<tr>
<td>None</td>
<td>156</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
More than one-fourth of the faculty (27.3%) who responded to the survey belonged to the content area of human development. Food science and human nutrition faculty constituted the next largest group of almost 17% (Table 4.1) with faculty in family studies being the third largest (14%). For the purposes of further analysis, housing and interior design was combined with consumer resource management, fashion merchandising combined with apparel and textiles, and faculty in “other” category comprised of counseling and program evaluation were combined with FCS Education. This consolidation was done to permit content comparisons due to a limited number of cases in some groups.

About a third (33%) of the faculty in the total sample were assistant professors with another 30% associate professors. The same percentages were reflected in the service-learning and non service-learning group. Robertson and Bean (1998) studied FCS faculty members’ job satisfaction in land grant universities. They reported that 67% held the rank of either assistant or associate professor, and 60% were tenured faculty, a trend consistent with present findings. About half of the faculty in the total sample as well as the service-learning group were tenured and another quarter were on tenure track (Table 4.1). About 20% of the sample in each group were not tenured. Sullivan and Redick (1991) investigated vocational home economics teacher educators and found that they were almost exclusively women of average age 49, two-thirds of the sample held the rank of associate or full professor and were tenured.

In the total sample, about a fourth of the faculty members were relatively new to teaching (1 to 5 years) and another fourth were between 11 and 20 years of teaching. About a third (29%) of the service-learning faculty were between 11 and 20 years of teaching (Table 4.1). Among non service-learning faculty, almost one third (31%) had been teaching
for less than five years. Almost 65% of the faculty belonging to the service-learning group taught at least one course using service-learning. Another one-fourth (24%) had taught between three to five courses that included a service-learning component.

Table 4.1. (continued).

<table>
<thead>
<tr>
<th>Personal Characteristics</th>
<th>Total Faculty</th>
<th>Service-Learning Faculty</th>
<th>Non Service-Learning Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Professional Responsibility</td>
<td>N = 369 %</td>
<td>n = 215 %</td>
<td>n = 146 %</td>
</tr>
<tr>
<td>Teaching</td>
<td>293 79.4</td>
<td>178 82.8</td>
<td>108 74.0</td>
</tr>
<tr>
<td>Research</td>
<td>61 6.5</td>
<td>32 14.9</td>
<td>28 19.2</td>
</tr>
<tr>
<td>Service</td>
<td>13 3.5</td>
<td>3 1.4</td>
<td>10 6.8</td>
</tr>
<tr>
<td>Advising</td>
<td>2 .5</td>
<td>2 .9</td>
<td>- -</td>
</tr>
<tr>
<td>Age</td>
<td>N = 368 %</td>
<td>n = 203 %</td>
<td>n = 147 %</td>
</tr>
<tr>
<td>25-30</td>
<td>16 4.3</td>
<td>11 5.1</td>
<td>5 3.4</td>
</tr>
<tr>
<td>31-40</td>
<td>67 18.2</td>
<td>29 13.6</td>
<td>38 25.9</td>
</tr>
<tr>
<td>41-50</td>
<td>100 27.2</td>
<td>65 30.4</td>
<td>33 22.4</td>
</tr>
<tr>
<td>51-60</td>
<td>144 39.1</td>
<td>85 39.7</td>
<td>56 38.1</td>
</tr>
<tr>
<td>61-70</td>
<td>38 10.3</td>
<td>23 10.7</td>
<td>13 8.8</td>
</tr>
<tr>
<td>Above 70</td>
<td>3 .8</td>
<td>1 .5</td>
<td>2 1.4</td>
</tr>
<tr>
<td>Gender</td>
<td>N = 370 %</td>
<td>n = 216 %</td>
<td>n = 146 %</td>
</tr>
<tr>
<td>Female</td>
<td>313 84.6</td>
<td>189 87.5</td>
<td>116 79.5</td>
</tr>
<tr>
<td>Male</td>
<td>57 15.4</td>
<td>27 12.5</td>
<td>30 20.5</td>
</tr>
<tr>
<td>Race</td>
<td>N = 359 %</td>
<td>n = 213 %</td>
<td>n = 146 %</td>
</tr>
<tr>
<td>African American</td>
<td>6 1.6</td>
<td>3 1.4</td>
<td>3 2.1</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>5 1.3</td>
<td>4 1.9</td>
<td>1 .6</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>8 2.1</td>
<td>4 1.9</td>
<td>4 2.7</td>
</tr>
<tr>
<td>Caucasian</td>
<td>339 90.4</td>
<td>195 91.6</td>
<td>136 93.1</td>
</tr>
<tr>
<td>Hispanic</td>
<td>7 1.9</td>
<td>5 2.3</td>
<td>2 1.4</td>
</tr>
<tr>
<td>Other</td>
<td>2 .5</td>
<td>2 .9</td>
<td>- -</td>
</tr>
</tbody>
</table>

This survey was sent to FCS faculty members who were currently teaching.

Therefore, the majority of the sample (75% and over), both in the service-learning as well as
the non service-learning group had their main professional responsibility as teaching (Table 4.1). For the purposes of further analysis, faculty, whose major professional responsibility was research, service, or advising were combined. This consolidation was done to permit comparisons between groups, due to a limited number of cases in some groups.

Consistent with earlier findings (Bean & Robertson, 1997; Sullivan & Redick, 1991), 40% of the respondents in the total sample as well as the two groups belonged to the age group of 51-60 years. Another 40% belonged to the combined age group of 31-50 years.

In a study of 128 service-learning and non service-learning faculty members in institutions of higher education in the United States, Patel (2004) found that service-learning educators were predominantly white caucasian (86%), and evenly divided by gender (48% females and 49% males). However, as is evident from Table 4.1, an overwhelming number of FCS faculty were white caucasian (90%) and women (over 80%).

**Research Question 2: Teacher Efficacy**

Data from the Ohio State Teacher Efficacy Scale (OSTES) developed by Tschannen-Moran and Hoy (2001) were used to answer research question 2: What are the teacher efficacy levels of collegiate FCS faculty who do and do not incorporate service-learning in their courses? Table 4.2 reported the descriptive statistics. To indicate confidence in their own feelings of competence as a teacher, faculty members were asked to respond to statements such as “how much can you do” regarding various aspects of teaching for each of the 13 items in the OSTES using a nine-point scale with answers ranging from “a great deal” (9) to “not at all” (1). A response score of 7 indicated that faculty members believed that they could do
quite a bit, while a score of 5 indicated that faculty had “some” confidence in their ability to
influence the classroom and students.

Table 4.2. Mean efficacy and t-test scores

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Minimum</th>
<th>Maximum</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service-Learning Faculty</td>
<td>216 (59%)</td>
<td>4.31</td>
<td>9.00</td>
<td>7.31</td>
<td>.89</td>
<td>3.5</td>
<td>.001</td>
</tr>
<tr>
<td>Non Service-Learning Faculty</td>
<td>151 (41%)</td>
<td>4.92</td>
<td>8.82</td>
<td>6.98</td>
<td>.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>371</td>
<td>4.31</td>
<td>9.00</td>
<td>7.17</td>
<td>.91</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Scores based on 1 = Not at all and 9 = A good deal.

The mean score for all faculty was 7.17, with service-learning faculty scoring a little
higher at 7.31 than their non service-learning counterparts at 6.98 (Table 4.2). The findings
showed that FCS college teaching faculty had a high efficacy level of almost 7.0 or more
indicating they believed they could do “quite a bit” in student and classroom management.

An independent samples t-test was performed to test if service-learning faculty had
higher mean efficacy scores than the non service-learning faculty (Table 4.2). The results
showed a significant difference ($t = 3.5, p < .01$) between the groups in their mean efficacy
scores.

An analysis of variance (ANOVA) was performed to detect differences in mean
efficacy levels by personal characteristics of FCS faculty, such as teaching content area, rank,
tenure status, number of years of college teaching, number of service-learning courses taught,
major professional responsibility held, age, and gender. For service-learning faculty, a
significant difference was found by teaching content area ($p < .01$) and gender ($p < .05$).
Pairwise comparisons indicated that mean efficacy scores of faculty members in FCS education (7.86) were significantly higher than those in other teaching content areas (Table 4.3) and female faculty members had higher efficacy scores compared to their male colleagues. Among non service-learning faculty, those faculty whose primary responsibility was teaching had significantly higher efficacy scores \((p \leq 0.05, M = 7.07)\) compared to those who had research, advising and service responsibilities \((M = 6.73)\).

![Teacher efficacy of FCS faculty](image)

Patel (2004) measured teacher efficacy on service-learning and non service-learning faculty, and reported a significantly higher teacher efficacy level for service-learning faculty,
a finding consistent with the present study. It was not possible to compare results with other studies as there remains a dearth of research on teacher efficacy in higher education.

Table 4.3. Significant teaching efficacy scores by personal characteristics

<table>
<thead>
<tr>
<th>Personal Characteristics</th>
<th>Mean Efficacy Scores for Service-learning faculty</th>
<th>Mean Efficacy Scores for Non Service-learning faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teaching Content Area</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apparel, Textiles &amp; Fashion</td>
<td>7.48</td>
<td></td>
</tr>
<tr>
<td>Merchandising</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Development</td>
<td>7.29</td>
<td></td>
</tr>
<tr>
<td>Consumer Resource Management</td>
<td>7.10</td>
<td></td>
</tr>
<tr>
<td>FCS Education</td>
<td>7.86</td>
<td></td>
</tr>
<tr>
<td>Family Studies</td>
<td>7.13</td>
<td></td>
</tr>
<tr>
<td>Food Science &amp; Human Nutrition</td>
<td>7.19</td>
<td></td>
</tr>
<tr>
<td>Food Services Production &amp; Hospitality</td>
<td>6.67</td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>7.36</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>6.93</td>
<td></td>
</tr>
<tr>
<td><strong>Major Professional Responsibility</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching</td>
<td>7.07</td>
<td></td>
</tr>
<tr>
<td>Research/advising/teaching</td>
<td>6.73</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Scores based on 1 = Not at all and 9 = A good deal.

**Research Question 3: Dominant Teaching Practice**

Data from the FCS Professional Teaching Perspective scale (FCSCI) were used to answer research question 3: What are the dominant teaching practices of collegiate FCS faculty who do and do not incorporate service-learning in their courses? This instrument required faculty members to describe their teaching practice by selecting whether the statements represented what they were doing “most of the time” (5) or “seldom” (1) in their classroom. A mean score more than 3.0 in each of the subscales represented a high implementation of that teaching practice. Similarly, a score less than 3.0 represented low implementation.
The mean score for the Reflective-Ethical subscale was 3.54 for the total sample, 3.74 for the service-learning faculty, and 3.25 for the non service-learning faculty (Table 4.4). The service-learning faculty had a higher mean score on the Reflective-Ethical subscale than the non service-learning faculty. The Technical-Rational mean score was below 3.0 for all groups, thereby indicating that both service-learning and non service-learning educators used the Technical-Rational perspective less frequently (Table 4.5).

Table 4.4. Dominant teaching practice and t-test scores: Reflective-Ethical

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Minimum</th>
<th>Maximum</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service-Learning Faculty</td>
<td>215</td>
<td>1.22</td>
<td>5.00</td>
<td>3.74</td>
<td>.75</td>
<td>6.0</td>
<td>.000</td>
</tr>
<tr>
<td>Non Service-Learning Faculty</td>
<td>151</td>
<td>1.33</td>
<td>5.00</td>
<td>3.25</td>
<td>.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Sample</td>
<td>371</td>
<td>1.22</td>
<td>5.00</td>
<td>3.54</td>
<td>.80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Scores based on 1 = Seldom and 5 = Most of the time.

Table 4.5. Dominant teaching practice and t-test scores: Technical-Rational

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Minimum</th>
<th>Maximum</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service-Learning Faculty</td>
<td>213</td>
<td>1.00</td>
<td>4.50</td>
<td>2.62</td>
<td>.85</td>
<td>-1.4</td>
<td>.168</td>
</tr>
<tr>
<td>Non Service-Learning Faculty</td>
<td>149</td>
<td>1.00</td>
<td>5.00</td>
<td>2.74</td>
<td>.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Sample</td>
<td>366</td>
<td>1.00</td>
<td>5.00</td>
<td>2.67</td>
<td>.82</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Scores based on 1 = Seldom and 5 = Most of the time.

The highest mean score was reported for the Reflective-Ethical subscale both in the total sample as well as in the service-learning and non service-learning groups (Table 4.4). It
was evident that FCS faculty members reported their predominant mode of teaching practice was Reflective-Ethical.

![Graph showing Reflective-Ethical score of FCS faculty](image)

An independent samples t-test was performed to examine the differences between the service-learning and non service-learning faculty on the two dimensions of the curriculum implementation scale. The results of the t-test indicated that the two groups were significantly different on the Reflective-Ethical perspective ($t = 6.0, p < .01$). There was no statistically significant difference between the two groups on the Technical-Rational perspective. The results indicated a significant difference in their mean scores with service-
learning faculty using the Reflective-Ethical perspective more often than non service-learning faculty.

![Technical-Rational score of FCS faculty](image)

An ANOVA indicated a significance difference \((p \leq 0.01)\) among service-learning faculty by teaching content area, major professional responsibility held \((p \leq 0.05)\), and number of service-learning courses taught \((p \leq 0.01)\). Pairwise comparisons indicated that faculty members in Family Studies and FCS Education had a significantly higher mean than those in Apparel, Textiles, and Fashion Merchandising (Table 4.6). Similarly, faculty whose major responsibility was research \((M = 4.02)\) used the Reflective-Ethical perspective to teaching more than those whose major professional responsibility was teaching \((M = 3.67)\). Faculty
who taught more than five service-learning courses had a higher Reflective-Ethical score ($M = 4.12$) than those who taught one to two service-learning courses (mean = 3.63).

Fox (2001) studied dominant teaching practices of FCS teachers in the Ohio public school system. She found Ohio teachers to not practice a Reflective-Ethical or Technical-Rational perspective to teaching. Ryu (1998) investigated teaching practices of Korean home economics teachers at the secondary level and reported that the majority of them practiced a Technical-Rational perspective to teaching. It was not possible to compare results with any other study as there was a paucity of research regarding teaching practices of collegiate faculty.

Table 4.6. Significant Reflective-Ethical mean scores by personal characteristics

<table>
<thead>
<tr>
<th>Personal Characteristics</th>
<th>Mean Reflective-Ethical Scores for Service-Learning Faculty</th>
<th>Mean Reflective-Ethical Scores for Non Service-Learning Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Content Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apparel, Textiles &amp; Fashion</td>
<td>3.50</td>
<td>2.96</td>
</tr>
<tr>
<td>Merchandising</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Development</td>
<td>3.78</td>
<td>3.43</td>
</tr>
<tr>
<td>Consumer Resource Management</td>
<td>3.35</td>
<td>3.32</td>
</tr>
<tr>
<td>FCS Education</td>
<td>4.05</td>
<td>3.56</td>
</tr>
<tr>
<td>Family Studies</td>
<td>4.07</td>
<td>3.25</td>
</tr>
<tr>
<td>Food Science &amp; Human Nutrition</td>
<td>3.60</td>
<td>3.19</td>
</tr>
<tr>
<td>Food Services Production &amp; Hospitality</td>
<td>3.31</td>
<td>2.69</td>
</tr>
<tr>
<td>Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Professional Responsibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching</td>
<td>3.67</td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td>4.02</td>
<td></td>
</tr>
<tr>
<td>Number of Service-learning courses taught</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2 courses</td>
<td>3.63</td>
<td></td>
</tr>
<tr>
<td>3-5 courses</td>
<td>3.86</td>
<td></td>
</tr>
<tr>
<td>More than 5 courses</td>
<td>4.12</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Scores based on 1 = Seldom and 5 = Most of the time.
Research Question 4: Perception about Service-learning

A researcher-developed instrument was used to answer research question 4: What are collegiate FCS faculty members’ perceptions of service-learning as a value-added teaching practice for learning and teaching within FCS? This instrument required faculty members to describe their perception about service-learning by selecting whether they “strongly agreed” (7) or “strongly disagreed” (1) on the statements. A mean score greater than 4.50 represented their perception that service-learning was a value-added teaching strategy in FCS. A mean score lower than 3.50 represented they did not recognize service-learning as a useful practice in FCS.

Table 4.7. Mean perception and t-test scores about service-learning

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Minimum</th>
<th>Maximum</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service-Learning Faculty</td>
<td>213</td>
<td>4.22</td>
<td>7.00</td>
<td>6.32</td>
<td>.61</td>
<td>7.4</td>
<td>.000</td>
</tr>
<tr>
<td>Non Service-Learning Faculty</td>
<td>146</td>
<td>2.50</td>
<td>7.00</td>
<td>5.73</td>
<td>.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Sample</td>
<td>362</td>
<td>2.50</td>
<td>7.00</td>
<td>6.08</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. Scores based on 1 = Strongly Disagree and 7 = Strongly Agree.

As evident from Table 4.7, mean perception scores of service-learning faculty were higher than non service-learning faculty. The mean score for the entire sample was 6.08, pointing to the fact that FCS faculty members perceived service-learning as a value added teaching strategy in FCS, whether or not they incorporated service-learning in their courses.

An independent samples t-test was performed to examine if service-learning faculty had higher mean perception scores than the non service-learning faculty (Table 4.7). The results indicated that service-learning faculty scored significantly higher than non service-
learning faculty in their mean perception scores ($t = 7.4$, and $p \leq 0.01$). An ANOVA indicated no significant differences within personal characteristics of FCS faculty on perception scores. It was not possible to compare results with other research as this study was the first of its kind in investigating FCS college faculty’s perception about service-learning.

FCS faculty members' perceptions about service-learning

![Frequency distribution graph showing the mean and standard deviation of perception scores.](Figure 4.4)

**Research Question 5: Motivators and Deterrents for Service-learning Faculty**

This section reports the results of a series of inquiries on the sources of motivation, encouragement, and obstacles faced by FCS faculty in implementing service-learning in their teaching. The modified Abes et al. (2002) instrument was used to gather data on research
question 5: What are the factors that motivate collegiate FCS faculty in implementing service-learning in their courses? Service-learning faculty were those who taught at least one course that included a service-learning component. Thus, 59% of the sample \((n = 216)\) were service-learning faculty.

**Who Successfully Encourages Faculty to Use Service-learning?**

Service-learning faculty were asked to identify those who encouraged them to use service-learning and the importance of each source of encouragement. Respondents most frequently received encouragement from the department chairperson (67.6%), with almost 62% receiving encouragement from another faculty member in the department (Table 4.12).

Table 4.8. Sources of encouragement and importance

<table>
<thead>
<tr>
<th>Sources of Encouragement</th>
<th>% of Encouragement Received</th>
<th>Level of Importance^1</th>
</tr>
</thead>
<tbody>
<tr>
<td>President / Senior Academic Officer</td>
<td>52.5</td>
<td>2.54</td>
</tr>
<tr>
<td>College Dean</td>
<td>54.5</td>
<td>2.61</td>
</tr>
<tr>
<td>Department Chairperson</td>
<td>67.6</td>
<td>2.90</td>
</tr>
<tr>
<td>Another faculty in the department</td>
<td>61.7</td>
<td>2.98</td>
</tr>
<tr>
<td>Faculty in another department</td>
<td>51.7</td>
<td>2.57</td>
</tr>
<tr>
<td>A community member</td>
<td>49.3</td>
<td>2.98</td>
</tr>
<tr>
<td>Students</td>
<td>39.7</td>
<td>2.98</td>
</tr>
</tbody>
</table>

^1Importance: 1 = Not important and 4 = Very important.

Service-learning faculty were asked to rate the level of importance of the above mentioned sources of encouragement on a Likert scale ranging from "not important" (1) to "very important" (4). Mean scores for importance of encouragement showed fellow faculty members, students, and community members to be the most important sources of encouragement in the decision to use service-learning (highest mean of 2.98).
Unlike Abes et al. (2002) study, where faculty reported receiving most encouragement from another faculty in the department, respondents in this study received the greatest encouragement from their department chairperson, followed by another faculty member in the department. More than half (54%) of the faculty received encouragement from the college dean as well. A striking finding both in the present study as well as the Abes et al. study underscored the importance that students and community members held in a faculty member's decision to incorporate service-learning.

**What Are the Effective Sources of Instructional Support for Service-learning?**

In order to understand perceived helpfulness for various forms of service-learning instructional support, service-learning faculty were asked to indicate forms of instructional support they received and the level of helpfulness of each. A four-point Likert scale ranging from "not helpful" (1) to "very helpful" (4) was used to rate helpfulness.

<table>
<thead>
<tr>
<th>Sources of Instructional Support</th>
<th>% of Support Received</th>
<th>Level of Helpfulnessa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advice from colleagues</td>
<td>69.8</td>
<td>3.22</td>
</tr>
<tr>
<td>Professional organizations /conference</td>
<td>63.1</td>
<td>2.91</td>
</tr>
<tr>
<td>Professional journals / presentations</td>
<td>58.3</td>
<td>2.91</td>
</tr>
<tr>
<td>Faculty development at your institution</td>
<td>50.5</td>
<td>2.93</td>
</tr>
<tr>
<td>Mentoring</td>
<td>32.7</td>
<td>3.11</td>
</tr>
<tr>
<td>Other</td>
<td>28.6</td>
<td>3.56</td>
</tr>
<tr>
<td>Faculty teaching handbook</td>
<td>18.7</td>
<td>2.69</td>
</tr>
</tbody>
</table>

*aHelpfulness: 1 = Not helpful and 4 = Very helpful.*

Advice from colleagues (69%) and help from professional organizations /conferences (63%) were reported to be effective sources of instructional support. Professional journals and
presentations were next (58%), followed by faculty development activities within an institution (50%). Although "other" sources were cited less frequently, their level of helpfulness was most prominent ($M = 3.56$). Community action members, local community centers, service-learning resources in the campus office, online resources, and books, were some of the "other" sources cited by the faculty. Advice from colleagues ($M = 3.22$) and mentoring ($M = 3.11$) were reported to be of sufficient help in service-learning teaching and instruction (Table 4.9).

Consistent with Abes et al.'s (2002) findings, advice from colleagues and aid from professional organizations/conferences were reported to be of substantial help in using service-learning. Levine (1994) stressed the importance of sending faculty members to conferences designed to support service-learning. Attendance at such meetings allowed faculty members to see and emulate what other members in their discipline were doing. Professional meetings could demonstrate the value of service-learning and provide the peer support needed to sustain a person's commitment to such a model of teaching.

**What Service-learning Outcomes Motivate Faculty Use of Service-learning?**

Service-learning faculty were asked to indicate the importance of the potential for positive outcomes in their decision to incorporate service-learning in their teaching. Using a four-point Likert scale ranging from "not important" (1) to "very important" (4), the mean for student learning outcomes was 3.71, compared to 3.02 for community-based outcomes.

<table>
<thead>
<tr>
<th>Motivating Outcomes</th>
<th>Mean Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student learning outcomes</td>
<td>78.4</td>
</tr>
<tr>
<td>Community outcomes</td>
<td>45.4</td>
</tr>
<tr>
<td>Professional responsibilities</td>
<td>24.6</td>
</tr>
</tbody>
</table>
Service-learning faculty were then asked to choose no more than three outcomes from a list of 15 motivating outcomes that were most important in their decision to use service-learning. Space was provided for respondents to include additional outcomes. The complete list included items related to student learning outcomes (7 items), community outcomes (5 items), and professional responsibilities (3 items). Mean frequencies were used because there were unequal number of items in each grouping. Mean frequency for student outcomes was measured by adding the total number of responses in each of the seven items and dividing by 7. Similarly, mean frequency for community outcomes was measured by adding the total number of responses in each of the five items and dividing by 5. Mean frequency related to professional responsibility was computed similarly.

On the average, student learning outcomes were selected most frequently as motivators (mean frequency = 78.4), followed by community outcomes and professional responsibilities (Table 4.10). In particular, the eight items that most strongly motivated service-learning use (selected by at least 25% of the respondents) were “increases student understanding of course material” (58.8%), “increases student personal development” (48.6%), “creates university-community partnerships” (39.8%), “increases student understanding of social problems as systemic” (38.9%), “increases student appreciation of diversity” (37.9%), “increases student cognitive development” (29.6%), “provides useful service in the community” (28.2%), and “increases students’ civic participation” (26.3%).

A Pearson chi-square test was used to determine significant differences, based on personal characteristics variables of FCS faculty members (teaching content area, faculty
rank, tenure status, number of years of college teaching, number of service-learning courses taught, major professional responsibility, age, and gender) for those eight items that most strongly motivated service-learning use (Table 4.11). The chi-squared analysis indicated that a significant difference existed among faculty in different teaching content areas on the item “increases students’ appreciation of diversity” ($p \leq .05$). A significant difference was also found between male and female faculty members on the items “increases students’ understanding of social problems as systemic” ($p \leq .05$) and “creates university-community partnerships” ($p \leq .05$).

Table 4.11. Most influential service-learning outcomes

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>%</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased student understanding of course material</td>
<td>58.8</td>
<td>NS*</td>
</tr>
<tr>
<td>Increased student personal development</td>
<td>48.6</td>
<td>NS*</td>
</tr>
<tr>
<td>Creates university-community partnerships</td>
<td>39.8</td>
<td>Gender*</td>
</tr>
<tr>
<td>Increases student understanding of social problems as systemic</td>
<td>38.9</td>
<td>Gender*</td>
</tr>
<tr>
<td>Increases student appreciation of diversity</td>
<td>37.9</td>
<td>Teaching content area*</td>
</tr>
<tr>
<td>Increases student cognitive development</td>
<td>29.6</td>
<td>NS</td>
</tr>
<tr>
<td>Provides useful service in the community</td>
<td>26.3</td>
<td>NS*</td>
</tr>
<tr>
<td>Increases students’ civic participation</td>
<td>26.3</td>
<td>NS*</td>
</tr>
</tbody>
</table>

* Not Significant.
* $p \leq .05$.

Crosstabulation analysis showed that a majority (64%) of the faculty members in apparel, textiles and fashion merchandising believed service-learning increased students’ appreciation of diversity. However, less than 40% of the faculty in other teaching content areas believed in this effect. Additionally, 60% of the males thought service-learning
increased students’ understanding of social problems as systemic compared to 40% of the females. Similarly, 42% of the females believed service-learning helped create university community partnerships compared to only 22% of the males.

In the space provided to include additional motivating outcomes, survey respondents cited application of textbook knowledge outside the classroom, making connection from research/theory to practice, teaching values, and changing attitudes as other factors motivating them to include service-learning in their teaching. One survey participant said “it demonstrates people’s needs to our relatively sheltered students and makes the FCS curriculum seem vastly more important to them.”

The findings indicate that student learning outcomes were most important in faculty’s decision to use service-learning which was consistent with past findings. Hammond (1994) reported curricular motivators as most influential in faculty’s use of service-learning. A large majority of the faculty members in Hesser’s (1995) study believed that service-learning “extensively” or “very extensively” contributed to conceptual and course content learning outcomes. To a lesser extent, service-learning faculty were also motivated by building university-community partnerships. Subsequent research is needed to explore aspects of university-community relationships that inspire faculty to continue building this thread.

What Factors Might Cause Faculty to Not Continue to Use Service-learning?

In order to determine how best to sustain faculty use of service-learning, service-learning faculty were asked to indicate the likelihood that they would continue to incorporate this teaching strategy in their teaching. Using a five-point Likert scale, ranging from “very likely” to “very unlikely” (5), the mean for all respondents was 1.36, indicating they were very likely to use service-learning in their teaching again in the future.
An analysis of variance (ANOVA) was performed to see if there were any differences between faculty members in their likelihood to continue using service-learning, based on personal characteristics such as teaching content area, faculty rank, tenure status, number of years of college teaching, number of service-learning courses taught, major professional responsibility held, age, and gender. A post hoc Tamhane’s test indicated a significant difference ($p \leq 0.01$) between the groups who taught 1-2 service-learning courses ($M = 1.47$) and 3-5 courses ($M = 1.13$).

Although faculty members indicated a strong intention to continue using service-learning, the service-learning faculty were asked what, if any, concerns might cause them not to continue to incorporate service-learning in their teaching, or to do so less frequently. Respondents were asked to choose no more than three items from a list of nine potential deterrents. Space was provided to write about additional potential deterrents. The nine potential deterrents were grouped into four categories related to time, logistics, and funding; student and community outcomes; reward structure; and comfort with ability to effectively use service-learning (Table 4.12). Mean frequencies were used because there were an unequal number of items in each grouping. Mean frequency for concerns related to time, logistics, and funding was measured by adding the total number of responses in each of the three items and dividing by 3. Similarly, mean frequency for student and community outcomes was measured by adding the total number of responses in the two items and dividing by 2. Mean frequency related to reward structure and ability to effectively use service-learning were computed similarly.

Concerns related to time, logistics, and funding were selected most frequently (mean frequency = 64.0), followed by reward structure (mean frequency = 59.0), ability to effectively
use service-learning (mean frequency = 39.5), and concerns related to student and community outcomes (mean frequency = 23.0).

Table 4.12. Potential deterrents to continuing service-learning

<table>
<thead>
<tr>
<th>Deterrent Categories</th>
<th>Mean Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time, logistics and funding</td>
<td>64.0</td>
</tr>
<tr>
<td>Reward structure</td>
<td>59.0</td>
</tr>
<tr>
<td>Ability to effectively use service-learning</td>
<td>39.5</td>
</tr>
<tr>
<td>Student and community outcomes</td>
<td>23.0</td>
</tr>
</tbody>
</table>

The three strongest potential deterrents to continued use of service-learning (selected by at least 25% of the respondents) were “service-learning courses are time intensive and therefore difficult to balance with my other professional responsibilities” (40.7%), “I have not been rewarded in my performance reviews and/or tenure and promotion decisions for my use of service-learning” (27.3%), and “I had difficulty securing funding for developing and/or implementing my service-learning course(s)” (25%).

A Pearson chi-square test was used to determine significant differences based on the personal characteristics variables of FCS faculty members (teaching content area, faculty rank, tenure status, number of years of college teaching, number of service-learning courses taught, major professional responsibility, age, and gender) for the three most frequently chosen potential deterrents for continued use of service-learning (Table 4.13). The chi-squared analysis indicated that a significant difference existed among faculty in differing ranks ($p \leq 0.05$) and tenure status ($p \leq 0.05$) on the item “I have not been rewarded in my performance reviews and/or tenure and promotion decisions for my use of service-learning.”
Crosstabulation analysis indicated that 30% of the assistant professors and 41% of the associate professors thought that they had not been rewarded in performance reviews and promotion decisions for using service-learning compared to only 23% of the faculty holding full professor rank. About one-third of the tenured faculty and those on tenure track (32%) indicated they had not been rewarded for implementing service-learning in their teaching.

Table 4.13. Most frequently cited potential deterrents

<table>
<thead>
<tr>
<th>Potential Deterrents</th>
<th>%</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service-learning courses are time intensive and therefore difficult to balance with my other professional responsibilities</td>
<td>40.7</td>
<td>NS*</td>
</tr>
<tr>
<td>I have not been rewarded in my performance reviews and/or tenure and promotion decisions for my use of service-learning</td>
<td>27.3</td>
<td>Rank*</td>
</tr>
<tr>
<td>I had difficulty securing funding for developing and/or implementing my service-learning course(s)</td>
<td>25.0</td>
<td>NS*</td>
</tr>
</tbody>
</table>

* Not Significant.

* p ≤.05.

Several respondents elaborated on potential deterrents in the open-ended section of the survey. Only one respondent commented on the reward structure saying that, “although I think it is somewhat rewarded in tenure and promotion decisions, it is absolutely not enough. In a points system, it is worth very little and so discourages me.” Lack of peer support, support from college/institution, time conflicts in setting up service projects, and difficulty in evaluating service-learning experience were the major barriers cited by service-learning faculty. Another person responded,

People teach for the love of it, not for the money. I am driven by the desire to communicate the joy of learning to eager minds. If there is no pleasure in teaching,
then it is agony. Please understand that the desire and belief in something does not always translate into action. There are numerous barriers that prevent one to put into action what one believes. I believe in service-learning and I will continue using it in my classes no matter whether I am rewarded or not.

Concerns related to time, logistics, funding, and reward structures were cited to be potential barriers in continued use of service-learning, a finding validated by previous studies. In Hammond’s (1994) study, issues of time and task drew the greatest response from faculty as factors that made service-learning more difficult than traditional teaching methods. Abes et al. (2002) reported similar findings. However, concerns regarding ability to effectively use service-learning were selected by almost 40% of the FCS faculty, a trend not amply highlighted by other research. More institutional resources need to be mobilized toward faculty training and development for improving their skills on service-learning. Pedagogical difficulty such as difficulty in adjusting to differing levels of student readiness and challenges associated with evaluation have been other persistent issues associated with service-learning.

Although lack of reward in implementing service-learning had been cited as a potential deterrent in past studies (Abes et al., 2002; Hesser, 1995), only one-fourth (27%) of the FCS service-learning faculty considered it as a demotivator. Lack of support in terms of funding, peer support, and concerns related to time and logistics need to be addressed more importantly to sustain FCS faculty’s use of service-learning.

**Does Reward Structure Influence Faculty’s Decision to Use Service-learning?**

Due to increased emphasis in the literature on faculty reward structure as a deterrent, faculty members were asked a specific question “as you think about whether you will continue to incorporate service-learning into your teaching, how important is it that you be rewarded
in your performance reviews and/or tenure and promotion decisions for doing so?” Using a four-point Likert scale ranging from “not important” (1) to “very important” (4), the mean for all service-learning faculty was 2.4.

An analysis of variance (ANOVA) was performed to determine if there were any differences in opinion among faculty members on the role of reward in continuing with service-learning based upon the eight personal characteristic traits (teaching content area, faculty rank, tenure status, number of years of college teaching, number of service-learning courses taught, major professional responsibility held, age, and gender). The results indicated a significant difference by faculty rank \( (p \leq 0.05) \) and a post hoc Tukey test suggested that the difference was between the groups associate professors \( (M = 2.62) \), assistant professors \( (M = 2.60) \), and instructors \( (M = 2.03) \). A significant difference was also found based on tenure status \( (p \leq 0.05) \). A post hoc Tamhane test accounted for the difference between non-tenure track faculty members \( (M = 2.09) \) and those who were on tenure track \( (M = 2.64) \). In the case of professional responsibilities held \( (p \leq 0.05) \), a post hoc Tamhane test indicated that teaching faculty members’ opinion on reward structure \( (M = 2.35) \) differed significantly from those who held primarily research, service, or advising responsibilities \( (M = 2.78) \).

In summary, the FCS service-learning faculty were equally divided in their opinions about the role of reward in using service-learning. A little over one-half (51%) thought reward was “not important” or “somewhat important” while 49% thought it was “important” or “very important” to be rewarded in performance reviews and/or tenure and promotion decisions for using service-learning. Although literature commonly suggests that faculty members will respond to opportunities for service-learning if such activity is rewarded (Levine, 1994), these
data from FCS faculty do not support that finding. Not being rewarded was not cited as a major barrier in pursuing service-learning.

Research Question 6: Deterrents for Non Service-learning Faculty

This section reports the results of a series of inquiries on the factors that deter non service-learning faculty from using service-learning. The Abes et al. (2002) instrument was used to gather information on research question 6: What are the factors that deter collegiate FCS faculty in implementing service-learning in their courses? Of the non service-learning faculty \(n = 152\), 142 faculty members responded they had heard about service-learning prior to this survey while 6 respondents reported they had not. Among those who had heard about service-learning \(n = 142\), 20\% \(n = 28\) responded that they had heard about service-learning but had not given thought as to whether or not to incorporate it into their teaching; while the remaining 80\% \(n = 114\) responded that they had given thought as to whether or not to incorporate it into their teaching. Results on deterrents for non service-learning faculty were analyzed for those 114 respondents.

What Factors Deter Faculty who do Not Use Service-learning from doing so?

On a five-point Likert scale ranging from “strongly disagree” (1) to “strongly agree” (5), faculty were asked to indicate for each of the 19 potential deterrents, the extent to which the factors contributed to their decision to not use service-learning. Space was provided to write about additional deterrents. The deterrents listed were grouped into four categories (Table 4.14) namely, time, logistics and funding concerns \(M = 2.91\); curricular and pedagogical concerns \(M =2.44\); institutional and professional concerns \(M = 2.19\); and student and community outcomes \(M =1.64\).
Table 4.14. Deterrents for service-learning use

<table>
<thead>
<tr>
<th>Deterrent Categories</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time, logistics and funding concerns</td>
<td>2.91</td>
</tr>
<tr>
<td>Curricular and pedagogical concerns</td>
<td>2.44</td>
</tr>
<tr>
<td>Institutional and professional concerns</td>
<td>2.19</td>
</tr>
<tr>
<td>Student and community outcomes</td>
<td>1.64</td>
</tr>
</tbody>
</table>

*Note.* Scores based on 1 = Strongly Disagree and 5 = Strongly Agree.

Table 4.15. Most frequently cited reasons for not incorporating service-learning

<table>
<thead>
<tr>
<th>Reasons</th>
<th>M</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do not use service-learning because service-learning courses are time intensive and would be difficult to balance with my other professional responsibilities</td>
<td>3.00</td>
<td>45</td>
</tr>
<tr>
<td>I do not use service-learning because it is not relevant to the courses I teach</td>
<td>2.96</td>
<td>42</td>
</tr>
<tr>
<td>I do not use service-learning because I anticipate having logistical problems coordinating the community service aspect of the course</td>
<td>2.92</td>
<td>43</td>
</tr>
<tr>
<td>I do not use service-learning because I anticipate having (or have had) difficulty securing funding for service-learning</td>
<td>2.87</td>
<td>34</td>
</tr>
<tr>
<td>I do not use service-learning because I have not been given and/or do not anticipate being given release time to develop a service-learning course</td>
<td>2.86</td>
<td>42</td>
</tr>
<tr>
<td>I do not use service-learning because it is unlikely that I will be rewarded in my performance review and/or tenure and promotion decisions for doing so</td>
<td>2.78</td>
<td>32</td>
</tr>
</tbody>
</table>

*Note.* Scores based on 1 = Strongly Disagree and 5 = Strongly Agree.

Table 4.15 lists the deterrents with mean greater than 2.75 and the percentage of respondents who chose “agree” and “strongly agree” in responding to those deterrents. The six items that most strongly deterred faculty from using service-learning (mean greater than 2.75) were “service-learning courses are time intensive and would be difficult to balance with my other professional responsibilities” ($M = 3.00$), “it is not relevant to the courses I teach” ($M = 2.96$), “I anticipate having logistical problems coordinating the community
service aspect of the course” \((M = 2.92)\) “I anticipate having (or have had) difficulty securing funding for service-learning” \((M = 2.87)\), “I have not been given and/or do not anticipate being given release time to develop a service-learning course” \((M = 2.86)\), and “it is unlikely that I will be rewarded in my performance review and/or tenure and promotion decisions for doing so” \((M = 2.78)\). Although these six items emerged as the strongest deterrents, caution should be taken in interpreting these results. The mean scores for the strongest deterrents were either 3.00 or close to 3.00, which corresponded to “neither agree nor disagree” in the five-point Likert scale.

An ANOVA indicated a significant difference between faculty members in various teaching content areas on the deterrent “it will not benefit my students” \((p \leq 0.01)\), “it will not benefit the community” \((p \leq 0.05)\), and “it is not relevant to the courses I teach” \((p \leq 0.01)\). Specifically, faculty in apparel, textiles and fashion merchandising \((M = 2.36)\) thought service-learning would not benefit their students or the community compared to faculty in human development and consumer resource management. Similarly, faculty in apparel, textiles and fashion merchandising strongly believed \((M = 4.29)\) service-learning was not relevant to the courses they taught compared to faculty in human development, consumer resource management, or family studies (Table 4.16).

A significant difference existed by faculty rank \((p \leq 0.05)\) on the deterrent “it is unlikely that I will be rewarded in my performance review and/or tenure and promotion decisions for doing so” between assistant professors \((M = 3.07)\) and full professors \((M = 1.93)\). Although there was an overall significant difference \((p \leq 0.05)\) for the deterrent “service-learning courses are time intensive and would be difficult to balance with my other professional responsibilities” by faculty rank, no significant pair-wise comparison existed.
An analysis of the means indicated that compared to professors ($M = 2.53$) and assistant professors ($M = 3.00$), instructors ($M = 4.50$) strongly agreed to the above deterrent (Table 4.16). A significant difference existed by tenure status of faculty ($p \leq .05$) on the deterrent “service-learning is not academically rigorous” between tenured faculty ($M = 2.11$) and those not tenured but in tenured track positions ($M = 1.59$).

Table 4.16. Factors that deter faculty use of service-learning

<table>
<thead>
<tr>
<th>Personal Characteristics</th>
<th>May not benefit my students</th>
<th>May not benefit the community</th>
<th>Not relevant</th>
<th>Not rigorous</th>
<th>May not be rewarded</th>
<th>Time Intensive/difficult to balance</th>
<th>Logistical problems</th>
<th>Difficulty to establish community partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Content Area</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apparel, Textiles, and Fashion Merchandising</td>
<td>2.36**</td>
<td>2.29*</td>
<td>4.29**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Resource Management</td>
<td>1.43**</td>
<td>1.43*</td>
<td>2.57**</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Family Studies Human Development</td>
<td>1.46**</td>
<td>1.50*</td>
<td>2.73**</td>
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<tr>
<td>Rank</td>
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<tr>
<td>Assistant Professor</td>
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<tr>
<td>Associate Professor</td>
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<tr>
<td>Full Professor</td>
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<tr>
<td>Instructor</td>
<td></td>
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<tr>
<td>Tenure Status</td>
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<tr>
<td>Tenured</td>
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<tr>
<td>On Tenure Track</td>
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<tr>
<td>Not Tenured</td>
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<td></td>
</tr>
<tr>
<td>Age</td>
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<tr>
<td>25-30 years</td>
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<tr>
<td>31-40 years</td>
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<tr>
<td>41-50 years</td>
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<tr>
<td>51-60 years</td>
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<tr>
<td>Above 60 years</td>
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<td></td>
</tr>
</tbody>
</table>

Note. Scores based on 1 = Strongly Disagree and 5 = Strongly Agree. $^*p \leq .05, ^{**}p \leq .01$. 
Although there was an overall significant difference by age ($p \leq 0.05$) on the deterrent “service-learning is not academically rigorous,” no significant pairwise comparisons existed. A significant difference was found ($p \leq 0.05$) by age on the deterrent “I anticipate logistical problems coordinating the community service aspect of the course.” An analysis of the means indicated that faculty in the age group 51-60 ($M = 2.54$) disagreed on the above deterrent compared to those in the age group 31-40 years ($M = 3.50$). A significant difference was also found ($p \leq 0.05$) on the deterrent “I anticipate having (or have had) difficulty establishing community partners.” A post hoc Tamhane’s test indicated that faculty in the age group 51-60 ($M = 2.19$) disagreed on the above deterrent, compared to those in the age group 31-40 years ($M = 3.15$).

Space was provided to cite additional deterrents in the open-ended section of the survey. Some of the responses mirrored the quantitative data regarding factors that deter service-learning use. Time and logistical issues were mentioned most frequently. A large number of respondents mentioned they were unable to implement service-learning due to large class size. Several respondents thought lack of support in terms of personnel would make service-learning classes extremely difficult to establish and manage. New and part-time faculty members indicated they had not received release time to develop a service-learning course. Quite a few faculty members mentioned it was difficult to take time out, due to precedence of other responsibilities such as research and advising in addition to teaching. One survey participant said “unfortunately service-learning efforts are not accounted for in tenure decisions. Need to take care of that before anything else.” Lack of relevance to course materials and content area were other reasons mentioned for not using service-learning.
Difficulty in establishing community partners was another major deterrent cited by non-service-learning faculty. In particular a faculty member said, “I have never found an agency or group willing to provide the effort needed to initiate student experience effectively.” Locating enough service-learning sites to accommodate an entire class and enable them to have meaningful experiences for small and not too large communities was cited as another deterrent. Difficulty in finding suitable placements and placement saturation were mentioned repeatedly in the open-end section of the survey. Unlike other disciplines, only one respondent mentioned he was reluctant to use service-learning because he had not seen “adequate experimental evidence that service-learning actually improves academic learning outcomes for students.” It seemed that FCS faculty members were aware of service-learning’s beneficial outcomes. Difficulty in evaluation challenged other faculty members in implementing service-learning.

A few respondents mentioned their lack of knowledge as to how to develop a service-learning course as a hindrance. Specifically, a respondent noted “when obtaining my education, I was not exposed to service-learning, so do not have enough experience with it to add it to the courses I teach.” Several faculty members expressed their inability in using service-learning in distance education courses. Many suggested that greater knowledge in how to incorporate a service-learning component in distance education courses would be helpful.

**What Might Increase the Likelihood that Faculty who do Not Use Service-learning will do so in the Future?**

All non-service-learning faculty (n = 142), whether or not they had given thought about incorporating service-learning in their teaching, were asked the likelihood that they would incorporate service-learning in their teaching. Using a five-point Likert scale “very unlikely”
to “very likely” (5), the mean was 2.64. A quarter (24%) of the faculty were “likely” or “very likely” to use service-learning, while another 43% were “very unlikely” or “unlikely” to use service-learning. The remaining 33% were unsure regarding incorporating service-learning.

The results were analyzed by teaching content area, rank, tenure status, number of years of college teaching, professional responsibilities held, age, and gender. The categories of faculty most likely to implement service-learning (mean greater than or equal to 3.00) were those in human development and food science and human nutrition ($M = 3.01$), assistant professors ($M = 2.98$), faculty teaching 6-10 years ($M = 2.96$), and age between 31-40 years ($M = 3.00$). The categories of faculty most unlikely to use service-learning (mean smaller or equal to 2.00) were in the teaching content area apparel, textiles, and fashion merchandising ($M = 2.14$) followed by those in food production and services ($M = 2.25$). An ANOVA indicated no significant difference for any other personal characteristics.

To supplement the data regarding likelihood of non service-learning faculty ($n = 142$) using service-learning in the future, irrespective of the fact whether they had given any thought about it or not, they were asked to answer an open ended question on what might increase the likelihood that they would incorporate service-learning into their teaching. Responses were similar to those already mentioned by other faculty members. For a large majority of the survey respondents, increased release time, reduction in current workload, reduction in class sizes, relevance to course content, and opportunity for developing new courses would greatly increase the likelihood of incorporating service-learning in their teaching. Availability of suitable community sites, community offers on projects and funding were cited frequently by most faculty members for initiating a service-learning component in courses.
Numerous respondents indicated that active encouragement from a college dean or department chairperson, direct initiative from mid-level management, and a formal college or university requirement for service-learning courses would increase the likelihood of incorporating this teaching strategy in their courses. Infrastructure support to manage complex logistical issues, staff support in terms of teaching assistance, funding support to develop courses, support in developing community connection, addition of credit hours to existing courses, and changes in departmental policies and practices related to course content were other reasons cited. In particular, one respondent mentioned:

I have tried it and believe in the concept. However, without university infrastructure support to manage all the complex logistical issues associated with it, the likelihood of doing more is significantly diminished. If universities are serious about this, they need to provide staff support to help manage it. Professors simply do not have the time in light of all the other professional demands.

A few faculty members mentioned reassignment of time/faculty workload credit to supervise the service-learning experience, receiving additional teaching-load units to compensate for the extra time and efforts, and recognition of service-learning efforts in evaluation and tenure might increase the likelihood of implementing service-learning.

Many faculty members mentioned that more instruction on how to develop a service-learning course, examples of service-learning activities/projects used by other faculty, opportunity to participate in training on how to fund and implement a service-learning component into established course curriculum, and information on how service-learning can meet specific learning competencies might encourage them in their decision to experiment with service-learning.
**Additional Findings**

It was not possible to do an analysis of nonrespondents. Hence, a two-way analysis of variance was performed for early and late respondents (response time) for both the service-learning and non service-learning groups (faculty group) on the major variables of interest to examine if there were any differences in responses (Table 4.17).

Table 4.17. Analysis of early and late respondents

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overall</th>
<th>Service-learning faculty</th>
<th>Non service-learning faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Mean Efficacy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early</td>
<td>7.12</td>
<td>.87</td>
<td>7.34</td>
</tr>
<tr>
<td>Late</td>
<td>6.96</td>
<td>.88</td>
<td>7.20</td>
</tr>
<tr>
<td>Mean Reflective-Ethical Score</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early</td>
<td>3.42</td>
<td>1.11</td>
<td>3.74</td>
</tr>
<tr>
<td>Late</td>
<td>3.49</td>
<td>.75</td>
<td>3.76</td>
</tr>
<tr>
<td>Mean Technical-Rational Score</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early</td>
<td>2.50</td>
<td>.68</td>
<td>2.59</td>
</tr>
<tr>
<td>Late</td>
<td>2.71</td>
<td>.69</td>
<td>2.73</td>
</tr>
<tr>
<td>Perception about</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service-learning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early</td>
<td>6.07</td>
<td>.18</td>
<td>6.32</td>
</tr>
<tr>
<td>Late</td>
<td>6.08</td>
<td>.72</td>
<td>6.32</td>
</tr>
<tr>
<td>Early (n = 280)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Late (n = 95)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.18. Analysis of variance for early and late respondents among service-learning and non service-learning faculty for mean efficacy levels

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response time</td>
<td>1</td>
<td>5.459</td>
<td>6.882</td>
<td>.009</td>
</tr>
<tr>
<td>Faculty group</td>
<td>1</td>
<td>10.132</td>
<td>12.773</td>
<td>.000</td>
</tr>
<tr>
<td>Response time X Faculty group</td>
<td>1</td>
<td>1.299</td>
<td>1.638</td>
<td>.201</td>
</tr>
<tr>
<td>Error</td>
<td>361</td>
<td>.793</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
There was a significant difference \((p \leq 0.01)\) between service-learning and non service-learning faculty in their mean efficacy scores, a finding consistent with overall results (Table 4.18). Although a significant difference \((p \leq 0.01)\) between the early and late respondents was found in their mean efficacy scores, this was not a concern. Literature on efficacy reveals that faculty members who are confident are prompt and punctual in their tasks and may have responded to this survey immediately and in a timely fashion as opposed to the late respondents.

Table 4.19. Analysis of variance for early and late respondents among service-learning and non service-learning faculty for mean Reflective-Ethical scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response time</td>
<td>1</td>
<td>.016</td>
<td>.027</td>
<td>.869</td>
</tr>
<tr>
<td>Faculty group</td>
<td>1</td>
<td>17.815</td>
<td>30.819</td>
<td>.000</td>
</tr>
<tr>
<td>Response time X Faculty group</td>
<td>1</td>
<td>.184</td>
<td>.318</td>
<td>.573</td>
</tr>
<tr>
<td>Error</td>
<td>360</td>
<td>.578</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There was a significant difference \((p \leq 0.01)\) between the service-learning and non service-learning faculty in their mean Reflective-Ethical scores (Table 4.19), a finding consistent with overall results. There was no significant difference between the early and late respondents in their mean Reflective-Ethical scores, a desirable finding. There were no significant differences in mean Technical-Rational scores between service-learning and non service-learning faculty, nor between early and late respondents, desirable and consistent findings (Table 4.20).
Table 4.20. Analysis of variance for early and late respondents among service-learning and non service-learning faculty for mean Technical-Rational scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response time</td>
<td>1</td>
<td>.100</td>
<td>.149</td>
<td>.700</td>
</tr>
<tr>
<td>Faculty group</td>
<td>1</td>
<td>.335</td>
<td>.497</td>
<td>.481</td>
</tr>
<tr>
<td>Response time X Faculty group</td>
<td>1</td>
<td>.658</td>
<td>.977</td>
<td>.324</td>
</tr>
<tr>
<td>Error</td>
<td>356</td>
<td>.673</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There was a significant difference ($p \leq .01$) between the service-learning and non service-learning faculty in their mean perception about service-learning scores, a finding consistent with overall results (Table 4.21). There was no significant difference between the early and late respondents, a desirable finding (Table 4.21). Therefore, it may be inferred that the late respondents did not differ substantially from early responders in the major variables of interest.

Table 4.21. Analysis of variance for early and late respondents among service-learning and non service-learning faculty for mean perception about service-learning scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response time</td>
<td>1</td>
<td>.100</td>
<td>.149</td>
<td>.700</td>
</tr>
<tr>
<td>Faculty group</td>
<td>1</td>
<td>.335</td>
<td>.497</td>
<td>.481</td>
</tr>
<tr>
<td>Response time X Faculty group</td>
<td>1</td>
<td>.658</td>
<td>.977</td>
<td>.324</td>
</tr>
<tr>
<td>Error</td>
<td>356</td>
<td>.673</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pearson correlation coefficients were calculated to examine if any significant correlations existed among the major variables of interest, namely efficacy scores, Reflective-Ethical and Technical-Rational scores, and mean perception scores. Table 4.22 indicates the significant correlations among the major variables. A stepwise regression is suggested to
further explore interrelationships between the variables. An inspection of the scatterplot matrix (Figure 4.5) illustrates the relationship further. The plot for teacher efficacy and the Reflective-Ethical mode of teaching shows a strong linear relationship between the variables. More investigation is recommended to explore the association further.

Table 4.22 Pearson correlation matrix

<table>
<thead>
<tr>
<th>Variable</th>
<th>Efficacy</th>
<th>Reflective-Ethical</th>
<th>Technical-Rational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflective-Ethical</td>
<td></td>
<td>.492**</td>
<td></td>
</tr>
<tr>
<td>Technical-Rational</td>
<td>.053</td>
<td>.144**</td>
<td></td>
</tr>
<tr>
<td>Perception about Service-learning</td>
<td>.306**</td>
<td>.455**</td>
<td>-.010</td>
</tr>
</tbody>
</table>

*Note. N = 371.*

** *p ≤ .01.*

Figure 4.5 Scatterplot Matrix
CHAPTER 5.
SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

Service-learning enables students to integrate academic learning with service in the community and to understand course content better through direct engagement in active learning. In the last decade, service-learning was identified as a strategic new direction for the family and consumer sciences profession (Mitstifer & Miller, 1999). Elsewhere, service-learning scholars identified how service-learning can enhance subject matter learning as the first of their top ten unanswered questions (Giles & Eyler, 1998). These studies called for careful examination of service-learning’s relationship and effectiveness in individual disciplines. Indeed implementation of service-learning represents a revision or addition of courses to the curriculum that falls under the purview of faculty. This study investigated FCS college faculty to learn about the current status and future prospect of service-learning in the field of family and consumer sciences.

Purpose

The main purpose of this study was to examine characteristics of FCS collegiate faculty who do and do not incorporate service-learning in their teaching, determine their teaching efficacy levels and dominant teaching practice, examine their perception about service-learning as an effective teaching strategy within FCS, and identify the factors that motivate and deter FCS faculty’s use of service-learning.
Research Questions

The major research questions for this study were:

- What are the personal characteristics of collegiate FCS faculty who do and do not incorporate service-learning in their courses with respect to teaching content area, faculty rank, tenure status, number of years in college teaching, major professional responsibilities held, number of service-learning courses taught, age, gender, and race?

- What are the teacher efficacy levels of collegiate FCS faculty who do and do not incorporate service-learning in their courses?

- What are the dominant teaching practices of collegiate FCS faculty who do and do not incorporate service-learning in their courses?

- What are collegiate FCS faculty members' perceptions of service-learning as a value-added teaching practice for learning and teaching within FCS?

- What are the factors that motivate collegiate FCS faculty in implementing service-learning in their courses?

- What are the factors that deter collegiate FCS faculty in implementing service-learning in their courses?

Methodology

The study used a cross-sectional survey research design to investigate the research problem. Descriptive statistics, t-tests, and analysis of variance were used to answer the research questions. The population consisted of all FCS teaching faculty members in
institutions of higher education in the United States. The sampling frame consisted of all FCS
teaching faculty members in the higher education institutions listed in the National Directory
of the Family and Consumer Sciences Division of the Association for Career and Technical
Education (2003-2004) that had an FCS teacher education program. Data were collected by
sending an electronic survey via email to a list of teaching faculty members chosen randomly
in the institutions listed in the National Directory. A total of 1440 usable email surveys were
sent. With 375 completed surveys, the response rate was 26.1%.

Five instruments were used in this study. The Personal Characteristics Survey was
used to identify the characteristics of FCS faculty who do and do not use service-learning.
This was a researcher-developed instrument. A slightly modified Ohio State Teacher Efficacy
scale (Tschannen-Moran & Hoy, 2001) was used to measure faculty efficacy. A revised
version of the FCS Curriculum Implementation scale (Fox, 2001) was used to measure
dominant teaching practices of FCS faculty. The faculty perception survey was a researcher-
developed instrument used to measure FCS faculty’s perception about service-learning. A
slightly modified Abes et al. (2002) instrument was used to determine factors that motivated
and deterred FCS faculty in utilizing service-learning.

Limitations

This study could be subject to the weaknesses related to survey research. Responses
were limited to the honesty and accuracy with which respondents completed the survey.
Faculty responses were based on their interpretation of the questionnaires and self-
representation about teaching efficacy and dominant teaching practice. Although a
definition of service-learning was provided in the instrument, all respondents may not have interpreted the definition in the same way. Therefore, some respondents who were considered service-learning faculty might not have actually used service-learning as intended by the definition. Instead, they might have included in their courses student teaching, internships, and clinical experiences.

**Major Findings**

A majority of the FCS faculty surveyed (59%) incorporated service-learning in their teaching practices. One-fourth of all respondents was from human development (27%), followed by food science and human nutrition (16%), and family studies (14%). About 33% of the sample were assistant professors, 29% associate, and 20% full professors. Half of the faculty were tenured, 29% on tenure track, and 20% non tenured. An overwhelming majority were women (85%), white (90%), and the modal age group was 51-60 years (40%).

Both service-learning and non service-learning faculty in general had high teaching efficacy levels, with scores of 7.31 and 6.98, respectively, on a scale of 1-9. The dominant mode of teaching practice for all faculty was Reflective-Ethical irrespective of whether they were service-learning or non service-learning faculty. The faculty members strongly perceived that service-learning was a value-added teaching strategy in FCS. The mean perception score for the total sample was 6.08 on a scale of 1-7.

Service-learning faculty received encouragement from department chairpersons and other colleagues in the department. Advice from colleagues and attendance in professional organizations and conferences provided faculty with useful instructional support. Student outcomes motivated faculty most in their decisions to incorporate service-learning. Concerns
related to time, logistics and funding; reward structure; and inability to effectively use service-learning were reported to be potential factors that might cause faculty to discontinue their service-learning efforts. For non service-learning faculty, issues related to time, logistics, and funding; and curricular and pedagogical concerns; were the greatest deterrents in not using service-learning.

Implications

Bringle and Hatcher (1995) speculated that service-learning was most likely to flourish in disciplines where there was a predisposition toward an ethic and practice of service such as with social work than in other disciplines such as engineering. The speculation proved to be rue for FCS in so far that 60% of the faculty members in this study had implemented service-learning in some form in their teaching. Twenty-five percent of the remaining faculty were very likely to incorporate service-learning in their teaching. A content analysis of the potential reasons for non service-learning faculty not to have utilized service-learning highlighted the willingness of faculty to experiment with this teaching strategy. Apart from issues related to time, logistics, and funding which had been mentioned often by faculty members as potential obstacles to service-learning, most were enthusiastic to try out this pedagogy if class sizes were small, if it were a requirement from the college or university, or if there were adequate instructions/resources available to develop service-learning courses. Unlike faculty members in other fields, only one respondent mentioned he was reluctant to use service-learning because he had not seen adequate experimental evidence that service-learning actually improved academic learning outcomes. It seemed that FCS faculty members were aware of service-learning’s beneficial outcomes. Consequently, an
overwhelming majority of the faculty members (93%) had either heard, thought, or incorporated service-learning in their teaching. High efficacy scores indicated that FCS faculty were efficacious in their instructional, management, and student engagement skills. Literature on teacher efficacy suggests that

teachers with a high sense of efficacy exhibit higher levels of planning and organization, openness to new ideas and new teaching methods, and high levels of enthusiasm and commitment to teaching. Thus, FCS faculty members could be responsive to this new wave of teaching and learning associated with service-learning. The teaching practice scores indicated that FCS faculty practiced a predominantly Reflective-Ethical perspective to teaching, which could lend its support to the code of ethics and practice of service associated with service-learning.

The prospect of service-learning’s prevalence and popularity within FCS appears to be promising. Beginning faculty members such as assistant professors and instructors are burdened with extra teaching loads coupled with their publishing responsibilities for attaining tenure. Adequate release time, opportunity to attend conferences, and inspiration from colleagues could provide the extra support needed to experiment with service-learning.

Faculty in apparel, textiles, and fashion merchandising expressed service-learning’s irrelevance to their teaching content. Publication of successful service-learning projects undertaken, both in apparel, textiles, and fashion merchandising, as well as other teaching content areas of FCS, will convince faculty of its relevance and importance. Both Hammond (1994) and Bringle et al. (1997) reiterated the importance of curricular outcomes in faculty’s decision to use service-learning. Documentation of successful service-learning activity in FCS can help interested faculty in modeling some of the examples in their own teaching (Abes
et al., 2002). Appropriate marketing of prestigious grants or awards received for service-learning can spread the word and be likely to remove skepticism about this teaching pedagogy.

Driscoll (1998) reiterated the importance of a community office to serve as a liaison between community-university partnerships. Such establishments can help alleviate some of the concerns related to time, placement, and saturation issues. Without adequate logistical support, inciting faculty's interest in service-learning will continue to remain a challenge.

Unlike Abes et al.’s (2002) study, service-learning faculty in this research were equally divided in their opinion about the role of reward structure for using service-learning. Although half of them thought that lack of recognition and reward in using service-learning could negatively affect their decision to continue with service-learning, only 27% actually selected it as a deterrent. Among non service-learning faculty, individuals with primary responsibilities in research and advising mentioned that incentives might motivate them to explore further with service-learning. Overall, faculty members in FCS did not seem to be too concerned with the role of reward in their pursuit of continuing with service-learning. Student outcomes, relevance to course content, release time, class sizes, and coordination were more important considerations for incorporating service-learning.

Although assistant professors and instructors were the standout group to raise concerns about time and logistical issues, they were the ones most likely to incorporate service-learning. This paradox highlights the importance of encouragement, opportunity, and appropriate incentives needed to motivate faculty into utilizing service-learning.
Recommendations

Instrument

One of the revelations of this research was an absence of a teacher efficacy scale for measuring efficacy levels of faculty members in higher education. One professor responded via email saying

After reading the instrument, I am under the impression that it was designed for a junior high or high school instructor in FCS. Normally, I teach a lecture section of 150 students in a large classroom. I also teach research methods to graduate students. The majority of the questions simply do not apply either to my teaching style (dictated by the environment) or the material that I cover. Therefore, I am not going to answer the questions, because it may effect your results in a negative manner.

Assuming that subject matter covered in present day research are important issues, why is it that teacher efficacy for higher education is not a concern? Why is it that teacher efficacy often measured at the K-12 level has been ignored at the higher education level?

FCS scholars are urging professionals to acknowledge the need to change the teaching strategies that traditionally have been used in FCS classrooms and to embrace a critical science perspective that more adequately reflects the changing social conditions encountered by individuals and families. However, there are not many instruments available that can measure an educator’s dominant teaching practice. The instrument used to measure dominant teaching practice of FCS faculty members was originally developed by Laster and used by Chatraphorn (1989), modified by Laster and tested by Ryu (1998), and modified and tested again by Fox (2001). Although this instrument has undergone many modifications, it is yet to reach its final stage.
The Reflective-Ethical subscale had a high reliability of .86 and the items loaded on a single factor. However, the Technical-Rational subscale needs revision. The items in that scale should be carefully examined and analyzed to convey only one thought or mode of action. Of special note are the items that ask questions about values and disciplines. They need to be structured well, as more than one idea is included in one statement. The items were written based on classroom scenarios of K-12 FCS teachers and there remains a need to develop an instrument that will measure collegiate faculty’s dominant mode of teaching. If there is an urge to implement something, there should be ways to provide feedback whether that is practiced or not.

The researcher-developed faculty perception survey may be modified and developed further. Because of the positive orientation of the items, they may be rephrased to provide greater variability. The 6 items added later to avoid response set bias may be examined further, and new items added to that list.

**Research**

The teaching efficacy of FCS faculty has not been explored extensively. There is some evidence that efficacy is not stable in the beginning years of teaching. A longitudinal study investigating teaching efficacy of FCS faculty members from their induction years is recommended. This might provide useful feedback for higher education programs.

More research is recommended to investigate the relationship between FCS faculty members’ efficacy and their dominant mode of teaching practice. Does higher efficacy predict reflective practice? Exploring the relationship between teacher efficacy and perception about service-learning for predicting reflective practice will help explain these two complex
constructs. Additionally, it is recommended that the dominant teaching practice be investigated both as a continuum as well as in two-dimensional perspectives. Does scoring higher on a reflective practice essentially mean moving away from technical practice? Or is there some kind of harmony, where depending on the circumstance, a person can be both reflective and technically oriented?

This study found that service-learning faculty practiced the Reflective-Ethical mode of teaching more often than non service-learning faculty. Does a Reflective-Ethical mode of teaching practice predict positive perceptions about service-learning? A future study that would investigate the relationship between faculty’s dominant mode of teaching practice and his/her attitude towards implementing service-learning in FCS courses will be worthwhile. Also, research faculty have been found to score higher on Reflective-Ethical practices than teaching faculty. More investigation is needed to know why this happened.

Because responses to this study were based on self report of practice, concurrent validation of faculty’s dominant mode of teaching through observation or interviews with the faculty will bolster the legitimacy of such findings. An in-depth qualitative study that will allow faculty to reflect on their teaching practices may provide a richer understanding of this complex construct.

In general, faculty in this study were found to be favorably disposed towards incorporating service-learning in courses. A future study that will investigate perceptions about service-learning among FCS administrators such as deans, department chairs, and program coordinators is recommended.
Faculty members were motivated to use service-learning, as they were interested in building university-community partnerships. More research is needed to investigate facets of university-community relationships that inspire faculty to continue building this thread.

**Practice**

Curriculum committees at the program level may want to revisit their curriculum stipulations. Requiring service-learning in the curriculum and offering multiple sections to large-enrollment courses might increase the likelihood of faculty to incorporate service-learning in their teaching. Building a community liaison office within the college/university campus might help alleviate logistical impediments. There is a call for institutions to be more forthcoming in providing resources to manage the complex logistical issues. Colleges and departments may like to redirect funding sources and release time to develop service-learning projects. Department chairpersons and fellow faculty members need to continue their support of service-learning with other interested faculty members. Conferences and workshops should continue to prepare, make available, and distribute materials that will offer ways of incorporating meaningful service-learning activities in FCS classrooms.

Service-learning needs to be linked to program majors and not just to classes or course offerings. Then, it becomes part of the culture of a college or department and students come to the program with an expectation to render service. Service-learning has a definite place in FCS curriculum and should be encouraged where appropriate, in the academic training of FCS students as it forms the link between academic learning and professional practice. Service-learning provides the application-based experience needed to succeed. Service-learning projects form the laboratory for students to hone skills and relate textbook material to professional practice.
Outreach and service activities need to be treated as scholarly activities in the same way that research always has been and teaching is increasingly being treated (Ward, 2003). Faculty and administrators must embrace a scholarship of engagement and acknowledge the important role of service in integrating student learning and civic engagement. On most campuses, service continues to be the least understood and correspondingly the least rewarded of all the faculty roles (Berberet, 1999; Boice, 2000). Efforts to connect campuses with communities will remain unfulfilled without attention to this and other dilemmas that face campuses, faculty, and the service movement in general.

**Conclusion**

In honoring Eleanor Vaines' contribution to scholarship and research, we need to continue our pursuit of reflective practice that would transform professional practice in a moral and ethical way. According to Vaines, the reflective practice journey starts when we wake up or recover from our old habits and become a pilgrim on a journey that is complex and uncertain but rich in value conflicts (Peterat, Smith, Lee, Sinkinson, & Tsepa, 2004). In the face of continuous changes, daily challenges, lack of funding for resources, and large class sizes, Vaines' path to reflective practice coupled with service-learning can pave the way for a new transition.
APPENDIX A

SURVEY INSTRUMENT
Family and Consumer Sciences

College Faculty

Survey Questionnaire

Mita Banerjee
Doctoral Candidate
Iowa State University

Note. This paper version of the survey was transferred to electronic survey with modified response and section use directions.
Faculty Efficacy Survey

**Directions.** This questionnaire is designed to help us gain a better understanding of the kinds of things that create challenges for faculty. Using the scale below, please indicate your belief about your ability to do the following by circling any one of the nine responses. Your answers will be kept confidential.

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Very little</th>
<th>Somewhat</th>
<th>Quite a bit</th>
<th>A great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. How much can you do to help your students value learning?  
2. To what extent can you craft good questions for your students?  
3. How much can you do to motivate students who show low interest in school work?  
4. How much can you do to control disruptive behavior in the classroom?  
5. To what extent can you provide an alternative explanation or example when students are confused?  
6. How well can you implement alternative teaching or learning strategies in your classroom?  
7. How much can you do to get students to follow classroom rules?  
8. How much can you do to get students to believe they can do well in school work?  
9. How much can you do to foster student creativity?  
10. To what extent can you use a variety of assessment strategies?  
11. How well can you establish a classroom management system with your students?  
12. How much can you do to help your students think critically?  
13. How well can you provide appropriate challenges for very capable students?
FCS Curriculum Implementation Survey

**Directions.** This questionnaire is designed to help us gain a better understanding of your **predominant teaching practice** in the last five years. Using the scale below, indicate how much of the time each statement below provides examples that are similar to what you are implementing in your FCS courses. Please **circle** any of the five responses. Your answers will be kept confidential.

<table>
<thead>
<tr>
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<th>This is</th>
<th>This is</th>
<th>This is</th>
<th>This is</th>
<th>This is</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>seldom</strong></td>
<td><strong>occasionally</strong></td>
<td><strong>me about</strong></td>
<td><strong>me</strong></td>
<td><strong>of the time</strong></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. I have my students identify the values, especially ethical values, which they and others hold; then we discuss the long-term consequences of acting on those values; we discuss what ought to be

2. I use classroom textbooks and any materials that I can get that are free or affordable. I use older resources that hold information that has stood the test of time

3. I encourage students to look for injustices and cultural actions that are not in the best long-term interests of families that we then attempt to change

4. My students identify real-life problems in the family, college, or community and then plan and take action to change the situation; e.g. start a weight control support group; write letters to policy makers

5. I ask questions like “what does the textbook say?” “What is the recommended method to do that task?” “What is the correct way to do that activity?"

6. Using reliable resources, students and I analyze hypothetical and real problems in our class, families, college, and community and propose possible solutions that will serve all

7. I tell students what they need to know to survive in the world today and make sure they know it through tests and observations

8. I teach critical thinking skills for students to use to evaluate their culture, recognize personal prejudices and self defeating ways of thinking, and initiate socially responsive action for the well-being of all

9. I try to help students evaluate the reality of their
situations; use knowledge to create ways to make the situation better for everyone involved; and encourage students to take personal and public policy action

<table>
<thead>
<tr>
<th></th>
<th>This is <strong>seldom</strong> like me</th>
<th>This is <strong>occasionally</strong> like me</th>
<th>This is like me about <strong>half</strong> of the time</th>
<th>This is like me a <strong>good deal</strong> of the time</th>
<th>This is like me <strong>most</strong> of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

10. I ask questions like “What should be done?” “Is this best for you? Your family? Now? In the future?” “What keeps this from happening?” “Will this action have the best long term consequences for everyone affected?”

11. I emphasize the correct way to perform FCS tasks such as food preparation, clothing construction, childcare, and interior decorating

12. I have projects that identify and address real-life concerns and needs, e.g., service-learning projects of students’ choice

13. I enforce my list of rules and policies that govern the class

14. I let students form their own groups to work, e.g., to prepare recipes, to plan a family budget, or to discuss about an acceptable solution to case studies

15. I explain what values are, and give examples of how values might affect our decisions, but I try not to talk about values otherwise

16. When classroom problems arise, the student(s) involved and I discuss what happened from everyone's perspective and work out a plan in the best interest of everyone affected

17. When I assign projects, laboratory problems, and simulations, I tell students what results they should find

18. I think it is important for students to find the one correct, or right, way to solve problems
Faculty Perception Survey

Directions. This questionnaire is designed to help us gain a better understanding of faculty member’s perception of how service-learning can further the goals of Family and Consumer Sciences. Using the scale below, please circle the number that indicates your opinion about each of the statements. Refer to the following definition of service-learning while choosing your responses.

Service-learning is a form of experiential education characterized by all of the following:
- student participation in an organized service activity
- student participation in service activities connected to specific learning outcomes
- student participation in service activities that meet identified community needs
- structured time for student reflection and connection of the service experience to learning

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Slightly Disagree</th>
<th>Uncertain</th>
<th>Slightly Agree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

1. Service-learning experiences raise questions about social issues
2. Service-learning enhances students' awareness of the world around them
3. Interaction with individuals during service participation helps students better understand critical problems facing society
4. Service-learning means a significant decrease in classroom instruction time
5. Service-learning brings about a sense of responsibility to address social issues by connecting students to local communities
6. Service participation helps students realize that they can make a difference in people’s lives
7. Service-learning deters student’s appreciation of diversity
8. Service participation inspires students to become involved in social issues
9. Service-learning helps students to think critically
10. Service-learning helps develop new skills such as leadership, interpersonal, or communication skills
11. Service-learning diverts attention from textbook content
<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Slightly Disagree</th>
<th>Uncertain</th>
<th>Slightly Agree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.</td>
<td>Service participation helps students apply theories and concepts to real settings</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>13.</td>
<td>Service-learning enhances self-esteem when students accomplish a challenging task</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>14.</td>
<td>Service-learning helps students to work cooperatively in group settings</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>15.</td>
<td>It is relatively easy to evaluate student’s performance in service-learning activities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>16.</td>
<td>Service-learning fosters responsibility by highlighting the impact students can have on others and on their community</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>17.</td>
<td>Service-learning experience challenges students to question assumptions about critical issues concerning society</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>18.</td>
<td>Service-learning is the academic equivalent to voluntary service</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>19.</td>
<td>Service-learning helps students realize that it is as much their responsibility as everyone else’s to do what they can to make the world a better place</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>20.</td>
<td>In service-learning students apply newly acquired skills and knowledge to address needs in the society</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>21.</td>
<td>Service participation helps students see inequities that exist in our society</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>22.</td>
<td>Service-learning helps develop an awareness of how people are affected by interconnected social structures.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>23.</td>
<td>Service-learning is not a rigorous educational pedagogy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>24.</td>
<td>Service-learning enhances the ability to get along with people of different races and cultures.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>25.</td>
<td>Service-learning classes that discuss social problems help students develop a heightened sense of commitment to social change.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
Faculty Motivation and Deterrents for the Use of Service-Learning

Service-learning is a form of experiential education characterized by all of the following:
- student participation in an organized service activity
- participation in service activities connected to specific learning outcomes
- participation in service activities that meet identified community needs
- structured time for student reflection and connection of the service experience to learning

PART A. Your Motivation To Incorporate Service-Learning Into Your Teaching

1. Using the definition of service-learning above as a guideline, do you currently teach or have you ever taught a course that included a service-learning component? Please circle your answer.
   a. YES → GO TO QUESTION 2a
   b. NO → GO TO QUESTION 9 (Page 11)

2a. Have any of the people listed below encouraged you to use service-learning?

2b. Of those who have encouraged the use of service-learning (those for which you circled “yes” below), how important was that encouragement in your decision to use service-learning?

<table>
<thead>
<tr>
<th>Not Important</th>
<th>Somewhat Important</th>
<th>Important</th>
<th>Very Important</th>
<th>Not Applicable</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>N/A</td>
<td>DK</td>
</tr>
</tbody>
</table>

Please circle your answers

<table>
<thead>
<tr>
<th>Person</th>
<th>2a. Received Encouragement</th>
<th>2b. Importance of Encouragement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Your president or senior academic officer</td>
<td>YES NO DK</td>
<td>1 2 3 4 N/A</td>
</tr>
<tr>
<td>2. Your college dean</td>
<td>YES NO DK</td>
<td>1 2 3 4 N/A</td>
</tr>
<tr>
<td>3. Your department chairperson</td>
<td>YES NO DK</td>
<td>1 2 3 4 N/A</td>
</tr>
<tr>
<td>4. Another faculty member in your department</td>
<td>YES NO DK</td>
<td>1 2 3 4 N/A</td>
</tr>
<tr>
<td>5. Faculty in other departments</td>
<td>YES NO DK</td>
<td>1 2 3 4 N/A</td>
</tr>
<tr>
<td>6. A community member</td>
<td>YES NO DK</td>
<td>1 2 3 4 N/A</td>
</tr>
<tr>
<td>7. Students at your institution</td>
<td>YES NO DK</td>
<td>1 2 3 4 N/A</td>
</tr>
</tbody>
</table>
3a. Which of the forms of instructional support listed below did you receive on how to incorporate service-learning into your teaching?

b. Of the forms of instructional support that you received (those for which you circled “yes” below), how helpful were each to you?

<table>
<thead>
<tr>
<th>Instructional support</th>
<th>3a. Received Support</th>
<th>3b. Helpfulness of Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Faculty teaching handbook</td>
<td>YES  NO</td>
<td>1 2 3 4 N/A</td>
</tr>
<tr>
<td>2. Faculty development at your institution</td>
<td>YES  NO</td>
<td>1 2 3 4 N/A</td>
</tr>
<tr>
<td>3. Professional organizations/conferences</td>
<td>YES  NO</td>
<td>1 2 3 4 N/A</td>
</tr>
<tr>
<td>4. Mentoring</td>
<td>YES  NO</td>
<td>1 2 3 4 N/A</td>
</tr>
<tr>
<td>5. Advice from colleagues</td>
<td>YES  NO</td>
<td>1 2 3 4 N/A</td>
</tr>
<tr>
<td>6. Professional journals/presentations</td>
<td>YES  NO</td>
<td>1 2 3 4 N/A</td>
</tr>
<tr>
<td>7. Other (please specify)</td>
<td>YES  NO</td>
<td>1 2 3 4 N/A</td>
</tr>
</tbody>
</table>

4. In general, how important are student-learning outcomes in your decision to incorporate service-learning into your teaching? How important are community-based outcomes?

<table>
<thead>
<tr>
<th>Not Important</th>
<th>Somewhat Important</th>
<th>Important</th>
<th>Very Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Please circle your answers

Student-learning outcomes 1 2 3 4

Community-based outcomes 1 2 3 4
5. Each of the items listed below may be outcomes of service-learning. Which, if any, of these outcomes have been most important to you in your decision to incorporate service-learning into your teaching?

Please circle no more than three outcomes.

a. Increases students' cognitive development
b. Increases students' understanding of the course material
c. Increases students' appreciation of diversity
d. Increases students' personal development
e. Increases students' moral development
f. Increases students' civic participation
g. Increases students' understanding of social problems as systemic
h. Provides useful service in the community
i. Gives community members a voice in addressing their needs
j. Contributes to community-building
k. Creates university-community partnerships
l. Allows me to participate in and/or support community service
m. Improves/revitalizes my teaching
n. Improves/contributes to my research agenda
o. Contributes to institutional/departmental service obligations
p. Other (please specify) __________________________

PART B. Your Intentions To Continue To Incorporate Service-Learning Into Your Teaching.

6. How likely is it that you will continue to incorporate service-learning into your teaching in the future?

(Please circle your answer)

a. Very likely
b. Likely
c. Neither likely nor unlikely
d. Unlikely

e. Very unlikely

7. Which, if any, of the reasons listed below might cause you not to continue incorporating service-learning into your teaching or to do so less frequently? Please circle no more than the three reasons most important to you.

a. I am not certain that my students benefited from my service-learning course(s)

b. I am not certain that the community benefited from my service-learning course(s)

c. Service-learning courses are time-intensive and therefore difficult to balance with my other professional responsibilities

d. I had difficulty coordinating the community service component of my course(s)

e. I had difficulty establishing partnerships in the community

f. I had difficulty securing funding for developing and/or implementing my service-learning course(s)

g. I have had difficulty or have been unable to secure release time to develop service-learning courses

h. I do not feel comfortable with my competency in using service-learning

i. I have not been rewarded in my performance reviews and/or tenure and promotion decisions for my use of service-learning

j. Other (please specify) ________________________

8. As you think about whether you will continue to incorporate service-learning into your teaching, how important is it that you be rewarded in your performance reviews and/or tenure and promotion decisions for doing so? (Please circle your answer)

a. Not important

b. Somewhat important

c. Important

d. Very Important

Go To Page 13 (here page 125) for Professional Characteristics Questions
PART C. Your Reasons For Not Incorporating Service-Learning Into Your Teaching

For your convenience, the definition of service-learning, which you should use to guide your responses to this survey, is repeated again.

Service-learning is a form of experiential education characterized by all of the following:
- student participation in an organized service activity
- participation in service activities connected to specific learning outcomes
- participation in service activities that meet identified community needs
- structured time for student reflection and connection of the service experience to learning

9. Prior to receiving this survey, had you ever heard of service-learning?
   (Please circle your answer)
   a. YES → GO TO QUESTION 10
   b. NO → GO TO QUESTION 12 (page 13)

10. Have you ever given any thought as to whether or not you should incorporate service-learning into your teaching? (Please circle your answer)
   a. YES → GO TO QUESTION 11
   b. NO → GO TO QUESTION 12 (page 13)

11. We are interested in understanding your reasons for not incorporating service-learning into your teaching. Indicate the extent to which you agree that each of the following statements describes why you do not use service-learning. Please circle your answer.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

a. I do not use service-learning because it will not benefit my students
b. I do not use service-learning because it is not academically rigorous
c. I do not use service-learning because it will not benefit the community
d. I do not use service-learning because it is not relevant to the courses I teach
e. I do not use service-learning because I am not interested in creating new courses or modifying existing courses to include a service-learning component
f. I do not use service-learning because service-learning courses are
time-intensive and would be difficult to balance with my other professional responsibilities

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

g. I do not use service-learning because I do not know how to do so effectively 1 2 3 4 5

h. I do not use service-learning because doing so will take away class time for teaching critical content 1 2 3 4 5

i. I do not use service-learning because it is unlikely that I will be rewarded in my performance review and/or tenure and promotion decisions for doing so 1 2 3 4 5

j. I do not use service-learning because my institution does not place a high value on teaching 1 2 3 4 5

k. I do not use service-learning because my institution does not place a high value on community service and/or engagement 1 2 3 4 5

l. I do not use service-learning because my institution's president or senior academic officer has not encouraged doing so 1 2 3 4 5

m. I do not use service-learning because my dean has not encouraged doing so 1 2 3 4 5

n. I do not use service-learning because my department chairperson has not encouraged doing so 1 2 3 4 5

o. I do not use service-learning because I have not been given and/or do not anticipate being given release time to develop a service-learning course 1 2 3 4 5

p. I do not use service-learning because I anticipate having logistical problems coordinating the community service aspect of the course 1 2 3 4 5

q. I do not use service-learning because I anticipate having (or have had) difficulty establishing community partners 1 2 3 4 5

r. I do not use service-learning because I anticipate having (or have had) difficulty securing funding for service-learning 1 2 3 4 5

s. I do not use service-learning because community service is not important to me 1 2 3 4 5

t. Other (please specify) __________________________ 1 2 3 4 5
12. How likely is it that you will incorporate service-learning into your teaching in the future? (Please circle your answer)
   
   a. Very unlikely
   b. Unlikely
   c. I am unsure
   d. Likely
   e. Very likely

13. What, if anything, might increase the likelihood that you will incorporate service-learning into your teaching in the future?
Personal Characteristics Survey

Please respond to the statement below by circling the letter of your choice or writing the appropriate response in the space provided.

1. What is your content area of teaching?
   A. FCS Education
   B. Clothing, Apparel, & Textiles
   C. Human Development & Family Studies
   D. Food Science & Human Nutrition
   E. Food Production & Services
   F. Other (Please specify) ____________

2. What is your current faculty rank?
   A. Professor
   B. Associate Professor
   C. Assistant Professor
   D. Instructor
   E. Other (Please specify) ____________

3. What is your tenure status?
   A. Tenured
   B. Not tenured, on tenure track
   C. Not tenured

4. How many years in total have you taught in a college or university? ____________ years

5. What is your major professional responsibility?
   A. Teaching
   B. Research
   C. Service
   D. Advising

6. Number of courses you taught within the last 5 years that incorporated service-learning? (courses that you have taught more than once should be counted only one time)
   A. None
   B. 1-2
   C. 3-5
   D. More than 5
8. What is your age group?
   A. 25-30 years
   B. 31-40
   C. 41-50
   D. 51-60
   E. 61-70
   F. Above 70 years

9. What is your gender?
   A. Female
   B. Male

10. What is your race/ethnicity?
    A. African American
    B. American Indian/Alaskan Native
    C. Asian/Pacific Islander
    D. Caucasian
    E. Hispanic
    F. Other ____________________

11. What is the name of your institution?

THANK YOU VERY MUCH FOR YOUR TIME AND HELP
ISU HUMAN SUBJECTS CONTINUING REVIEW AND OR MODIFICATION FORM

TYPE OF SUBMISSION:  Continuing Review  Modification  Continuing Review and Modification

Principal Investigator: Madhumita Banerjee  Phone: 320-654-0413
Degree: M.S.  Correspondence Address: 30 Mackay Hall, Iowa State University 50011
Department: AESHM  E-mail Address: mbanerjee@iastate.edu
Project Title: Teaching Practices of FCS Faculty
IRB ID: 05-169
Date of Last Continuing Review:

IF STUDENT PROJECT
Name of Major Professor: Cheryl O. Hausafus  Phone: 515-294-5307
Department: AESHM  Campus Address: 30E Mackay Hall
E-mail Address: haus@iastate.edu

FUNDING INFORMATION:

☐ External Grant/Contract  ☒ Internal Support (no specific funding source) or Internal Grant (indicate name below)
Name of Funding Source: Partially funded by the College of FCS
OSPA Record ID on Gold Sheet:

☐ Part of Training, Center, Program Project Grant – Director: Overall IRB ID No: 05-169

CONFLICT OF INTEREST
The proposed project or relationship with the sponsor require the disclosure of significant financial interests that present an actual or potential conflict of interest for investigators involved with this project. By signing this form, all investigators certify that they have read and understand ISU's Conflict of Interest policy as addressed by the ISU Faculty Handbook and made all disclosures required by it. (http://www.provost.iastate.edu/facultv.)

Do you or any member of your research team have a conflict of interest?  ☑ Yes  ☐ No
If yes, has the appropriate disclosure form been completed?  ☑ Yes  ☐ No

ASSURANCE
I certify that the information provided in this application is complete and accurate and consistent with proposal(s) submitted to external funding agencies. I agree to provide proper surveillance of this project to insure that the rights and welfare of the human subjects are protected. I will report any adverse reactions to the IRB for review. I agree that modifications to the originally approved project will not take place without prior review and approval by the Institutional Review Board, and that all activities will be performed in accordance with state and federal regulations and the Iowa State University Federal Wide Assurance.

Madhumita Banerjee
Signature of Principal Investigator
4/13/05

Studay Projects: Faculty signature indicates that this application has been reviewed and is recommended for IRB review.
Cheryl O. Hausafus
Signature of Supervising Faculty
4/13/05

EXPEDITED per 45 CFR 46.110(b) Category  Letter
STUDY REMAINS EXEMPT per 45 CFR 46.101(b)  
WAIVER of SIGNED CONSENT per 45 CFR 46.117(c)
WAIVER of ELEMENTS of Consent per 45 CFR 46.116
VULNERABLE POPULATION per 45 CFR 46_
INFORMED CONSENT DOCUMENT

TITLE: Teaching Practices of Family and Consumer Sciences College Faculty

INVESTIGATORS: Madhumita Banerjee, Dr. Cheryl O. Hausafus

This is a research study. Please take your time in deciding if you would like to participate.

PURPOSE. The purpose of this study is to investigate teaching practices of Family and Consumer Sciences college faculty. The first objective will be to investigate teacher efficacy levels and the dominant teaching perspective of Family and Consumer Sciences (FCS) faculty in collegiate FCS courses. The second objective will be to explore FCS faculty’s perception of the connection between Family and Consumer Sciences and service-learning. Lastly, this study will look at sources of faculty motivation and deterrents in implementing service-learning in college level FCS courses.

BENEFIT. As a Family and Consumer Sciences teaching faculty member you are invited to participate in this study. We ask you to indicate your teaching practices and perceived motivation or deterrents to implementing service-learning in your courses. Results of this study will broaden family and consumer sciences pedagogy by helping us better understand the connection between service learning practices and content applications.

TIME/PROCEDURE. The survey will take approximately 15-20 minutes to respond. You may skip any question that you do not wish to answer or that makes you feel uncomfortable.

RISK. There are no foreseeable risks from participating in this study.

COSTS AND COMPENSATION. You will not have any costs from participating in this study. You will not be compensated for participating in this study. However, after receipt of the completed survey, as a token of appreciation, your name will be included in a lottery for eight $25 gift certificates from Amazon.com to be mailed to you in June, 2005.

PARTICIPANT RIGHTS. Your participation in this study is completely voluntary and you may refuse to participate or discontinue at any time. If you decide to not participate in the study or discontinue, your name will not be entered in the lottery for drawing gift certificates.

CONFIDENTIALITY. To ensure confidentiality, no personal information will be asked. Subjects will be assigned a unique code that will be used on forms instead of your name. Only the researchers will have access to the completed surveys and data files. The computer data files containing the survey responses will be password protected. If the results are published, your identity will remain absolutely confidential.
QUESTIONS OR PROBLEMS. You are encouraged to ask questions at any time. For further information about the study contact Cheryl O. Hausafus, Associate Professor, (515) 294-5307, haus@iastate.edu or Mita Banerjee, (320) 654-0413, mbanerje@iastate.edu at any time. If you have any questions about the rights of research subjects or research-related injury, please contact Ginny Austin Eason, IRB Administrator, (515) 294-4566, austingr@iastate.edu, or Diane Ament, Research Compliance Officer (515) 294-3115, dament@iastate.edu.

Returning the survey indicates that you voluntarily agree to participate in this study, that the study has been explained to you, that you have been given the time to read the document and that your questions have been satisfactorily answered.

INVESTIGATOR STATEMENT

I certify that the participant has been given adequate time to read and learn about the study. It is my opinion that the participant understands the purpose, risks, benefits and the procedures that will be followed in this study and has voluntarily agreed to participate.

Madhumita Banerjee
(Person Obtaining Informed Consent)
APPENDIX C

EMAIL LETTERS OF CONTACT
Dear Family and Consumer Sciences Faculty Member,

My name is Mita Banerjee. I am pursuing a Ph. D in Family and Consumer Sciences Education from Iowa State University. For my dissertation research, I am attempting to better understand teaching practices of Family and Consumer Sciences (FCS) faculty. You have been randomly selected to participate in this research and will soon receive a survey by email.

As a part of the study, I will be looking at teacher efficacy levels and dominant teaching practices of Family and Consumer Sciences faculty that do or do not incorporate service-learning in their courses. Secondly, the study will try to explore FCS faculty’s perception of the connection between Family and Consumer Sciences and service-learning. Lastly, this study will look at sources of faculty motivation and deterrents in implementing service-learning in college level FCS courses. You will be providing important feedback that will broaden family and consumer sciences pedagogy by helping us better understand current teaching practices and connections between service learning practices and content applications.

If you believe that you have been selected incorrectly, and should not be a part of this group, e.g., because you are not teaching, are not affiliated to an institution of higher education, please contact me at (320) 654-0413 or email at mbanerje@iastate.edu so that a survey is not mailed to you erroneously.

Please feel free to ask questions or concerns at any time. I would deeply appreciate your participation in this research study. Thank you for your time and effort.

Sincerely,

Mita Banerjee, Doctoral candidate in Family and Consumer Sciences Education and Studies (FCEDS), Iowa State University, (320) 654-0413, mbanerje@iastate.edu

Cheryl O. Hausafus, Ph. D., Associate Professor in Family and Consumer Sciences Education and Studies (FCEDS), Iowa State University, (515) 294-5307, haus@iastate.edu
Email Cover Letter

Dear Family and Consumer Sciences Faculty Member,

My name is Mita Banerjee. I am pursuing a Ph. D in Family and Consumer Sciences Education from Iowa State University. For my dissertation research, I am attempting to better understand teaching practices of Family and Consumer Sciences (FCS) faculty at the collegiate level. You have been selected randomly to participate in this research. As a token of appreciation, your name will be included in a lottery for eight $25 gift certificates from Amazon.com to be mailed to you in June, 2005. You will be notified by email about the drawings.

I am requesting approximately 15-20 minutes of your time. Please complete the survey “Teaching Practices of Family and Consumer Sciences College Faculty” by clicking on the link http://www.fcs.iastate.edu/classweb/Surveys/madhumita/survey.html. The informed consent document is attached to this mail. Completing this survey will give you an opportunity to reflect on your own teaching practices and may help you to further discover your beliefs and perception about FCS teaching pedagogy and service learning.

As a part of the study, I will be looking at teacher efficacy levels and dominant teaching practices of Family and Consumer Sciences faculty. Secondly, the study will try to explore FCS faculty’s perception of the connection between Family and Consumer Sciences and service-learning. Lastly, this study will look at sources of faculty motivation and deterrents in implementing service-learning in college level FCS courses. You will be providing important feedback that will broaden family and consumer sciences pedagogy by helping us better understand current teaching practices and connection between service learning practices and content applications.

To ensure confidentiality, no personal information is being asked. Participants will be assigned a unique code that will be used on forms instead of your name. Only the researchers will have access to the completed surveys and data files. The computer data files will be password protected. If the results are published, your identity will remain absolutely confidential.

We would be happy to answer any questions or concerns that you may have about this study. We would deeply appreciate your participation in this research. Thank you for your time and effort.

Sincerely,

Mita Banerjee, Doctoral candidate in Family and Consumer Sciences Education and Studies (FCEDS), Iowa State University, (320) 654-0413, mbanerje@iastate.edu

Cheryl O. Hausafus, Ph. D., Associate Professor in Family and Consumer Sciences Education and Studies (FCEDS), Iowa State University, (515) 294-5307, haus@iastate.edu
Reminder Email

Dear Family and Consumer Sciences Faculty Member,

My name is Mita Banerjee. I am pursuing a Ph. D in Family and Consumer Sciences Education from Iowa State University. For my dissertation research, I am attempting to better understand teaching practices of Family and Consumer Sciences (FCS) faculty at the collegiate level. As a token of appreciation, your name will be included in a lottery for eight $25 gift certificates from Amazon.com to be mailed to you in June, 2005.

An email was sent to you approximately two weeks ago with an internet link to a survey titled “Teaching Practices of Family and Consumer Sciences College Faculty”. As of today, we have not received anything from you. Perhaps the mailing did not reach you or you were busy with all the many responsibilities. Please click on the link http://www.fcs.iastate.edu/classweb/Surveys/madhumita/survey.html to access the survey.

I understand how little spare time is available to faculty members. I am requesting approximately 15-20 minutes of your time. Completing this survey will give you an opportunity to reflect on your teaching practices and may help you to further discover your beliefs and perception about FCS teaching pedagogy and service learning.

Your participation is completely voluntary but I would like to encourage you, as a faculty member to make sure your valuable insight and experiences are included in research whenever possible.

Thank you so much for your time and effort.

Sincerely,

Mita Banerjee, Doctoral candidate in Family and Consumer Sciences Education and Studies (FCEDS), Iowa State University, (320) 654-0413, mbanerie@iastate.edu

Cheryl O. Hausafus, Ph. D., Associate Professor in Family and Consumer Sciences Education and Studies (FCEDS), Iowa State University, (515) 294-5307, haus@iastate.edu
REFERENCES


Rosenberg, L. (2000). Becoming the change we wish to see in the world: Combating through service-learning learned passivity. *Academic Exchange Quarterly, 4*, 6-11.


*Journal of Family and Consumer Sciences, 96*(1), 49-51.


