CAREER CHOICE DECISIONS OF FAMILY AND CONSUMER SCIENCES EDUCATION RECENT GRADUATES:

IMPLICATIONS FOR RECRUITMENT TO ADDRESS THE TEACHER SHORTAGE

by

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Cheryl A. Mimbs

Daisy Stewart and Betty Heath-Camp, Co-Chairs

(ABSTRACT)

A national teacher shortage in Family and Consumer Sciences (FCS) prompted the development of this study. This study examined career motivations of recent graduates of FCS to determine target audiences and marketing strategies for recruitment to address the teacher shortage. Personal, educational, and employment demographics, career choice decisions, and contextual factors of recent graduates of FCS teacher licensure programs in 14 southern states were examined. The study also examined differences between first and second career graduates.

A survey instrument developed by Serow (1994) was adapted for use in this study. Subjects were asked to indicate which of 35 career choice factors and personal values influenced their decision to become a teacher and to choose FCS as a field of study. The instrument was mailed in May 1996 to 494 graduates, whose names were obtained from teacher educators. The final sample consisted of 396 graduates. A total of 262 respondents completed the survey for a return rate of 66%.

All but five of the respondents were female. The average age was 30 years. Ten percent were from minority groups. Over 40% lived and worked in rural areas or towns
with under 10,000 population. Eighty-eight percent completed their teacher licensure through a bachelor's degree program. Most made their career choice decision while in college. Employment demographics indicated 43% of respondents were second career graduates, who indicated they had various first careers before seeking teacher certification. A total of 31% of respondents, although certified, were not teaching. Reasons given included not being able to find a job in the geographical area where they wanted to live or being employed in another field.

Interest in FCS subject matter, enjoyment of working with young people, interest in families, helping people, professional satisfaction, and creativity were the reasons most often given as influencing career choice decisions. Cluster analysis of graduates responses on career choice factors revealed five groupings. These are (1) altruistically motivated, (2) interest, flexibility, and variety of career, (3) secondary school experience influenced, (4) socially conscious and friend influenced, and (5) college experience influenced.
DEDICATION

This dissertation is dedicated to my loving parents, Joseph John Lango, Jr. and Joan Margaret Lango, whose encouragement and enduring support helped me always reach to do my best; to my maternal grandmother and loving friend, Margaret Mary Ulinger, for her willingness to listen and her belief in me; to my precious daughters, Johanna Louise and Carolyn Margaret, for their patience and love throughout the many long hours they have sacrificed of their time with me; to the memory of my late husband and true friend, Donald Joseph Mimbs, whose example of courage and faith throughout very difficult times gave me the strength and confidence to look to the future and pursue my dreams; and to my Lord God, who gave me these wonderful people, inspired me, sustained me, and made it all possible. Thank you.
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Special thanks goes to Dr. James D. Moran, III for his considerable support, encouragement, and time, with the many hours of teaching and review throughout the research and statistics process. His expertise and assistance in serving on my committee greatly facilitated timely completion of this study.

I would like to express my appreciation to everyone in the Dean's Office of the College of Human Ecology at the University of Tennessee, Knoxville and my new colleagues in the Department of Human Resource Development. Special thanks goes to Dr. Jackie McInnis for her patience, encouragement, and guidance; to Dean Jacky DeJonge for giving me an opportunity to complete my degree from Virginia Tech while beginning a new career; to Melinda Sutton without whose valuable technical assistance and kind patience this project would never have been completed; to Julie Cantrell for always helping with a smile; to Dianna King and all the others who helped with the
multiple mailings; and to Dr. Vickie Stout, a wonderful new friend and colleague who provided moral support and guidance.

I would also like to thank the many family and consumer sciences teacher educators who provided names and addresses for developing the sample for the study. Special thanks to the many recent graduates of teacher education programs who provided their valuable participation in the study. I would also like to thank my students for their patience and understanding and the opportunity to work with them as they prepare for their own careers as teachers of family and consumer sciences.
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CAREER CHOICE DECISIONS OF FAMILY AND CONSUMER SCIENCES EDUCATION RECENT GRADUATES: IMPLICATIONS FOR RECRUITMENT TO ADDRESS THE TEACHER SHORTAGE

Several studies have been conducted in recent years both at state and national levels that indicate a family and consumer sciences (formerly home economics) teacher shortage in secondary schools (Miller & Meszaros, 1996; Jackman & Rehm, 1994; McInnis, 1992; Mimbs, 1995; Morse, 1988). A recent supply and demand study in Virginia indicated a need for about 60 teachers each year until the year 2001 (Mimbs, 1995), yet Virginia's teacher-education programs have graduated approximately a total of only 10 new teachers per year in recent years (Weis & Pomraning, 1992, 1993).

Decreases in numbers of teacher-education graduates and increases in teacher retirements indicate a significant need for family and consumer sciences (FCS) teachers in California (Morse, 1988). Data from a preliminary report of a study on the need for teachers in the state of Maine indicated that 84% of the state's FCS teachers, who responded, plan to retire by the year 2005 (Maine Family and Consumer Sciences Educators Association, 1995). A 1992 Tennessee study indicated that 59% of the 505 teachers surveyed plan to retire by the year 2008 (McInnis, 1992). This study also estimated that the teacher-education programs in Tennessee prepare a total of about 15 teachers per year, which falls about 20% short of projected need.

Jackman and Rehm's (1994) national study supports the need for teachers and indicates a serious shortage. The current and future need for teachers is so great that the Family and Consumer Sciences Education Division of the American Vocational
Association (AVA) held a pre-conference session to address the teacher shortage crisis and recruitment strategies in November 1995. A research recommendation supported by session participants was the collection of current data that provides a descriptive profile of recent graduates and a target recruitment audience.

Teacher shortages may be linked to the reasons that lead people to choose teaching as a career. A key motivational factor for choosing teaching as a career, identified from a profile study of new educators, is the desire to improve their lives and the lives of their students (Berg, 1992). Su (1993) indicated intrinsic rewards over extrinsic rewards as an important motivation for entering the teaching profession. Being empowered by ideals is characteristic of those choosing teaching as a career.

An additional career influence for choosing to become a teacher is through the example of others. These examples include their own teachers and family members who were teachers (Bullough, 1989). A recurring theme, found through the National Study of Educators, was the effect of the students' positive socialization by their own teachers as a strong influence (Su, 1993). Kidder (1989), for example, described a teacher who was inspired by a former teacher and who continually inspires her own students. Some choose teaching as a way to "give back" to those teachers who helped them (Bogue, 1991).

In a study of 377 preservice education students, influences of other people including former teachers and family members were found to be the significant motivations for choosing teaching as a career (Marso & Pigge, 1994). Family was shown to be an influence for most of those who chose teaching as a career in the study by Su (1993). Some women also indicated their own state of motherhood became an influence as they
felt teaching tied well to a mothering role, and some felt they could teach better than the teachers in their own children's schools (Su, 1993). In Bullough's (1989) case study of a first year, non-traditionally aged teacher, the teacher indicated that both her mother's teaching and her own motherhood were strong influences on her choice of teaching as a career.

When studying career development theories, Super (1990) noted that we must consider the past, present, and future. This includes a person's goals, values, attitudes, and beliefs as they are connected to their life experiences. These life experiences can be affected by several factors. Vondracek, Lerner, and Schulenberg (1986) described career development as "a complex life-span process whose substance is determined by the developing person in interaction with his/her environment" (p. 44). Not only are there developmental issues for the person, there are also those of the complex dynamic social context. Society has at its base the family unit. Contextual factors within families affect individual career choice decisions. These influences may be more apparent to those second career (i.e., older) graduates who likely are at different life stages in their personal and family development than younger graduates. This study sought to identify any differences in personal, family, and work lives of those second career graduates and whether those differences motivated their career choice decisions.

Lerner (1993) described "developmental contextualism" as a model that examines the multiple, reciprocal relationships between individuals and the others in their context, such as family members, friends, teachers, and coworkers. To accurately examine career motivations of graduates, understanding the changing contexts within which individuals
and families function is important. Vondracek et al. (1986) conceptualized development of career choice as “one feature of a person’s development...the ways in which a person’s changing context--family, school, friends, community, and culture, for instance--influence and are influenced by these individual developments...” (p. 82).

Since persons choosing teaching as a career are influenced by such a variety of motivational factors, determining which factors most influenced the recent graduates' career choice may help address the teacher shortage. Identifying the factors will help FCS teacher educators in determining a target recruitment audience. Career choice decisions are not made in a vacuum. The motivational factors, values, attitudes, beliefs, life-stages, and family circumstances that affect career choice were examined through this study.

The critical issues addressed in this research project were focused around the following five research questions:

1. What personal, educational, and employment demographics characterize recent graduates of FCS teacher education programs?

2. What factors influenced graduates to choose teacher certification for their career preparation?

3. What factors influenced graduates to choose FCS as a teaching discipline?

4. At what stage(s) in their personal, family, and work lives did graduates make their career choice decision to prepare for teacher certification in FCS?

5. How do the demographics, career choice factors, and life stage factors differ between those graduates who identified their teacher certification preparation as their first career and those for whom it was a second career?
Method

Subjects

The population for this study consisted of graduates of family and consumer sciences (FCS) teacher education and licensure programs from academic years 1992 through 1995 in fourteen southern states designated as Regions 2 and 4 by the American Vocational Association (AVA). The states in Region 2 are Alabama, Florida, Georgia, Kentucky, North Carolina, South Carolina, Tennessee, and Virginia. The states in Region 4 are Arkansas, Louisiana, Mississippi, New Mexico, Oklahoma, and Texas.

These regions were chosen for two reasons. The first was the researchers' familiarity with Region 2 which facilitated getting addresses for graduates. The reason for including Region 4 was to provide a larger population. It is interesting to note that nine of the states from these two regions were among the top 22 states for producing the greatest numbers of FCS teachers for the years 1991-93 (Weis & Pomraning, 1993). The National Directory of the Home Economics Division of AVA recorded a total of 292 FCS teacher education bachelor's degrees awarded to individuals in institutions in regions 2 and 4, with an additional 111 master's, fifth year, or post-bachelor's certification degrees in FCS education for the calendar year July 1, 1992 to June 30, 1993 (Weis & Pomraning, 1993).

Names and addresses of graduates were obtained through responses from a letter to the teacher educators at all institutions that have a family and consumer sciences teacher-education and licensure program in Regions 2 and 4 (see Appendix B). Names and addresses of the teacher educators were obtained from the 1993-94 National Directory of the Home Economics Division of AVA (Weis & Pomraning, 1993).
names of the institutions which prepare FCS teachers were confirmed in *A National Database on Vocational Teacher Education*, prepared by the National Center for Research in Vocational Education (NCRVE, 1990). A total of 92 institutions were sent letters resulting in a return from seven whose programs had closed and 46 others who sent addresses for a 54% return rate. (See Appendix B for a list of participating institutions and closed programs.) A total of 494 graduates’ addresses were obtained from the 46 institutions who responded to the request, and they made up the base population.

The states in this study represent a large proportion of the national graduates and enrollment in FCS education. A total of 541 bachelor's degrees were awarded in FCS education in all schools of FCS in the United States in 1991-92 as reported by the Food and Agricultural Education System (FAEIS). Of those, the 224 degrees awarded in FCS education in institutions in the 14 states in this study, constituted about 41% of the total degrees granted (FAEIS, 1993). In addition, 132 master's degrees and 13 doctoral degrees in FCS education were awarded in 1991-92 in these states (FAEIS, 1993). For fall 1995, the institutions that participated in this study had an enrollment of 449 students, about 31% of the total national baccalaureate enrollment in FCS teacher education of 1452 persons (FAEIS, 1996).

Seventeen of the 38 non respondent institutions in this study were also nonrespondent schools for the FAEIS study (1996). FAEIS data on the other 21 institutions that were nonrespondents for this study showed an enrollment of 191 students in FCS education. Therefore the reporting institutions in the FAEIS study which are from
AVA Regions 2 and 4 have currently enrolled 640 baccalaureate students in FCS education, which is 44% of the national baccalaureate enrollment (FAEIS, 1996).

Minority graduates were 9% of the respondents in this study. Data from the 1996 FAEIS report indicated a 9% minority enrollment in all responding schools for those in bachelor's degree programs nationally in FCS education in 1995. As expected, this study also reinforced the belief that FCS teachers are almost always female. Current undergraduate enrollment of seniors in FCS education programs for all schools nationally who responded for 1995 was 555 females to 7 males (FAEIS, 1996).

Instrumentation

A survey instrument developed by Serow (1994) was adapted for use in this study. Serow examined the career decision factors and personal values of preservice teacher-education students. The survey instrument for this study had four parts. The first part of the survey asked graduates to indicate which career decision factors influenced their choice of teaching as a career and FCS as a teaching discipline, and whether teaching was their first full-time career. If teaching was their second full-time career, graduates were asked to indicate their first career and length of time in that career. A question asking when graduates made their initial career decision was also included. The second part of the survey instrument was designed to gather employment data such as type of teaching position or description of other occupation if not teaching, and satisfaction with their current position. The third section was designed to obtain personal demographic data. The fourth and final section was developed to gather educational information including characteristics of graduates' teacher-education programs, how they financed their
education, and their involvement in professional organizations. The sections as described above are similar to those used in other studies that examined career choice motivations for teachers (Marso & Pigge, 1994; Serow, 1994; Sweeney, et al 1990; Su, 1993). In addition, Serow's (1994) testing of the survey items over a 10-week interval with a subsample population produced a .50 average test-retest reliability.

The survey instrument was field-tested by eight graduates of a FCS licensure program at a large land-grant university in the southeast to determine the clarity of the survey instrument and test the procedure for data collection. These graduates were from the academic years 1989 through 1991, the three years prior to those used for this study. Minor adaptations to the instrument were made upon recommendations from field test participants and from two teacher educators who reviewed the survey. (See Appendix E for details regarding field test.)

Survey Procedures

The final survey packet (including the revised survey instrument, cover letter, and self-addressed stamped envelope) was mailed to all 494 graduates in May 1996. Surveys were coded for follow-up of nonrespondents. A reminder postcard was mailed two weeks later to nonrespondents, followed by a second mailing of the letter and survey three weeks later. A second postcard reminder was mailed after two weeks. A third mailing of the survey and letter was sent approximately four months after first mailing for the purpose of reaching persons who may not have responded to the first mailings because of summer activities. (See Appendices C and D for survey instrument and instructions to subjects.)
After returns for insufficient and invalid addresses (n = 80), returns from persons who indicated they did not seek teacher certification (n = 14), and returns from others who indicated they did not want to participate (n = 4) were accounted for, 396 graduates made up the total sample with 190 graduates in Region 2 and 206 graduates in Region 4. Region 2 had 132 respondents and Region 4 had 130 for a total of 262. This was a 69% response rate for Region 2 and a 63% response rate for Region 4, with a 66% response rate overall.

Personal, educational, and employment demographics were compared for early and late respondents because telephone numbers were not available to do typical follow up of nonrespondents. The first 40 persons to return their surveys were categorized as early respondents and the last 40 as late respondents. A comparison of early and late respondents on demographic variables indicated no appreciable differences.
Results

Data analysis will be presented separately for respondent characteristics and career decision factors. Primary analyses for the respondent characteristics were frequency distributions, and for the career decision factors were frequency distributions, chi square, and cluster analysis. The analysis of respondents will be discussed with regard to personal, educational, and employment demographics comparing first and second career graduates. The analysis of important factors identified by respondents will be separated by factors influencing the decision to seek teacher certification for career choice, factors influencing FCS as a field of study, and personal values that influenced career choice. In addition, career choice motivations and group profiles of graduates based on response to career choice factors will be discussed, and first and second career graduates responses will be compared.

Analysis of Respondent Characteristics

Personal demographics. Although surveys were mailed to graduates of teacher education programs in only the fourteen southern states, ten respondents indicated they lived in seven other states as well. These were California, Pennsylvania, Colorado, Nebraska, Kansas, Indiana, and Maryland (see Table 1).

Respondents indicated their geographical classification for both where they worked and where they lived. Forty-three percent indicated they worked in rural or small town (under 10,000 population) settings, and 44% lived in rural or small town settings (Figure 1).
Table 1

Where Graduates Are Living by State and AVA Region

<table>
<thead>
<tr>
<th>State</th>
<th># of Graduates</th>
</tr>
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<tbody>
<tr>
<td><strong>AVA Region 2</strong></td>
<td></td>
</tr>
<tr>
<td>Alabama</td>
<td>15</td>
</tr>
<tr>
<td>Florida</td>
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<td>Georgia</td>
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</tr>
<tr>
<td>Kentucky</td>
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</tr>
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<td>North Carolina</td>
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<td>South Carolina</td>
<td>4</td>
</tr>
<tr>
<td>Tennessee</td>
<td>17</td>
</tr>
<tr>
<td>Virginia</td>
<td>12</td>
</tr>
<tr>
<td><strong>AVA Region 4</strong></td>
<td></td>
</tr>
<tr>
<td>Arkansas</td>
<td>16</td>
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<tr>
<td>Louisiana</td>
<td>29</td>
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<tr>
<td>Mississippi</td>
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</tr>
<tr>
<td>New Mexico</td>
<td>11</td>
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<td>Oklahoma</td>
<td>20</td>
</tr>
<tr>
<td>Texas</td>
<td>45</td>
</tr>
<tr>
<td>Other States not in AVA Regions 2 and 4</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>259</strong></td>
</tr>
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</table>

*Note.* Three persons did not complete this survey item
Figure 1. Geographical classifications of where graduates work and live.

Note. Nineteen persons did not complete the survey item on geographical work location. Six persons did not complete the survey item on where they live by geographical classification.
Females made up the overwhelming majority of respondents with only 5 of the 262 respondents being male. The sample includes 10% minority (either African Americans, Native Americans, or Hispanics) and a 90% Caucasian majority.

Those graduates who indicated that they had children living in their home totaled 38%. Fifty percent of second career graduates and 30% of first career graduates fell into this group. Sixty-six percent of the respondents were married, 24% single, and the remaining 10% divorced/separated or widowed. The average age of respondents was 30 years. Thirty-four percent (n = 88) of respondents were over 30 years of age and were considered older than average and thus nontraditional students. Fifty-four percent of second career graduates fell equally into the 31-40 age group and the 41-50 age group, whereas the majority of first career graduates (85%) were under 31 years of age (see Table 2).

**Educational demographics.** Graduates were asked to identify which academic year they received their licensure or certification to teach in order for the researcher to compare it to receipt of degree date. Ten percent of graduates (n = 27) received their bachelor's degree prior to 1992. Most of these were second career graduates. Most graduates (76%) received their bachelor's degree from the years 1993 to 1995 (n = 75, 66, and 55 respectively). This parallels receipt of certification.
Table 2

**Number and Percentage of Graduates in Age Categories by First and Second Career**

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<th></th>
<th>n</th>
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<th>31-40</th>
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<th>over 50</th>
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<tr>
<td>1st Career</td>
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<td>123</td>
<td>9</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>85%</td>
<td>6%</td>
<td>8%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>2nd Career</td>
<td>113</td>
<td>47</td>
<td>31</td>
<td>31</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>42%</td>
<td>27%</td>
<td>27%</td>
<td>4%</td>
</tr>
<tr>
<td>Total</td>
<td>258</td>
<td>170</td>
<td>40</td>
<td>43</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>66%</td>
<td>15%</td>
<td>17%</td>
<td>2%</td>
</tr>
</tbody>
</table>

**Note.** Four first career graduates did not give their age.
Most graduates (88%) indicated they had completed their FCS teacher certification in a bachelor's degree program. However, the other 12% (n = 30) received their certification through a variety of other types of programs. Twenty percent of second career graduates indicated they received licensure through other programs, compared to only 5% of first career graduates (see Table 3).

Respondents were asked to indicate if FCS was their first choice of teaching field. Forty-one respondents (16%) indicated other subjects as their first choice of teaching field, noting ten different teaching fields. The one most often given was elementary education (n = 15) (see Table 4).

Graduates were asked to choose all those that applied from a list of resources they used to finance their teacher preparation. The resource most often checked was parental support, followed closely by scholarships and student loans. Sixty-two percent of first career graduates indicated parental support as a key financial factor compared to 43% of second career graduates. Not surprisingly, more second career graduates indicated earnings and spousal support as a financial factor than first career graduates (see Table 5).

Respondents' participation in professional organizations was quite varied with 37% holding membership in at least one or two organizations, and 23% having membership in three or more. However, 40% of respondents indicated no membership or activity in professional organizations. Forty-six percent of second career graduates indicated no membership compared to 35% of first career graduates. (see Table 6).
Table 3

Numbers and Percentages of Graduates by Type of Teacher Certification Program

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Bachelor's</th>
<th>Post-Bachelor's</th>
<th>5th Year Program</th>
<th>Master's Degree</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Career</td>
<td>147</td>
<td>139</td>
<td>5</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>95%</td>
<td>3%</td>
<td>0%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>2nd Career</td>
<td>112</td>
<td>90</td>
<td>13</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>80%</td>
<td>12%</td>
<td>3%</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td>259</td>
<td>229</td>
<td>18</td>
<td>3</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>88%</td>
<td>7%</td>
<td>1%</td>
<td>3%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Note. Three persons did not complete this item.
<table>
<thead>
<tr>
<th>Discipline</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Education</td>
<td>15</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>5</td>
</tr>
<tr>
<td>Business Education</td>
<td>5</td>
</tr>
<tr>
<td>Special Education</td>
<td>4</td>
</tr>
<tr>
<td>English</td>
<td>3</td>
</tr>
<tr>
<td>Music</td>
<td>3</td>
</tr>
<tr>
<td>Theater and Speech</td>
<td>2</td>
</tr>
<tr>
<td>Government</td>
<td>2</td>
</tr>
<tr>
<td>Science</td>
<td>1</td>
</tr>
<tr>
<td>Math</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>41</strong></td>
</tr>
</tbody>
</table>
Table 5

**How Education Was Financed**

<table>
<thead>
<tr>
<th></th>
<th>First Career (n=149)</th>
<th>Second Career (n=113)</th>
<th>Total (n=262)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Support</td>
<td>93 (62%)</td>
<td>49 (43%)</td>
<td>142 (54%)</td>
</tr>
<tr>
<td>Scholarships</td>
<td>75 (50%)</td>
<td>54 (48%)</td>
<td>129 (49%)</td>
</tr>
<tr>
<td>Student Loans</td>
<td>67 (45%)</td>
<td>53 (47%)</td>
<td>120 (46%)</td>
</tr>
<tr>
<td>Earnings</td>
<td>54 (36%)</td>
<td>54 (48%)</td>
<td>118 (45%)</td>
</tr>
<tr>
<td>Grants</td>
<td>56 (38%)</td>
<td>47 (42%)</td>
<td>103 (39%)</td>
</tr>
<tr>
<td>Spousal Support</td>
<td>27 (18%)</td>
<td>31 (27%)</td>
<td>58 (22%)</td>
</tr>
<tr>
<td>Savings</td>
<td>28 (19%)</td>
<td>21 (19%)</td>
<td>49 (19%)</td>
</tr>
<tr>
<td>Other</td>
<td>3 (2%)</td>
<td>6 (5%)</td>
<td>9 (3%)</td>
</tr>
</tbody>
</table>

**Note.** Graduates were asked to mark all that apply so percentage does not equal 100.
Table 6

**Number and Percent of Graduates' Membership in Professional Organizations**

<table>
<thead>
<tr>
<th>Number of Professional Organizations</th>
<th>n</th>
<th>None</th>
<th>One</th>
<th>Two</th>
<th>Three</th>
<th>Four or More</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Career</td>
<td>149</td>
<td>53</td>
<td>37</td>
<td>22</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>35%</td>
<td>25%</td>
<td>15%</td>
<td>13%</td>
<td>12%</td>
</tr>
<tr>
<td>2nd Career</td>
<td>113</td>
<td>52</td>
<td>18</td>
<td>20</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>46%</td>
<td>16%</td>
<td>18%</td>
<td>12%</td>
<td>8%</td>
</tr>
<tr>
<td>Total</td>
<td>262</td>
<td>105</td>
<td>55</td>
<td>42</td>
<td>33</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40%</td>
<td>21%</td>
<td>16%</td>
<td>13%</td>
<td>10%</td>
</tr>
</tbody>
</table>
Employment demographics. Not all graduates were currently teaching, in fact 31\% (n = 82) indicated they were not teaching. Of those, 71\% (n = 58) were second career graduates, while 28\% (n = 24) were first career graduates. Of those not teaching, 80\% (n = 65) indicated they wanted to teach in the future. The majority (n = 46) of these were second career graduates.

Graduates were given a list of seven reasons for not teaching currently and were asked to check all that applied. The most common response was: "I am already employed in another occupation (n = 29). Forty-one percent of non-teaching second career graduates and 23\% of first career non-teaching graduates fell into this group. The second most often chosen response was "I have not been able to secure a teaching job in the geographical area in which I want to live" (n = 27). Thirty-three percent of second career non-teaching graduates and 36\% of first career non-teaching graduates fell into this group (see Table 7).

The majority of graduates were teaching (n = 180). Eighty-nine percent (n = 160) indicated they were teaching FCS full-time. Five percent (n = 10) were teaching FCS at least part-time, and 6\% (n = 10) were teaching other subjects. Two graduates did not indicate what they were teaching (see Table 8). For those who indicated what they were teaching (n = 180), 69\% were teaching primarily consumer and homemaking FCS classes\(^1\), and 7\% were teaching primarily occupationally-focused FCS classes.

\(^1\) Consumer and homemaking classes include all those except primarily occupationally-focused courses. Some examples include FCS I and II, parenting, nutrition, textiles, child development, personal relationships, and others.
Table 7

Reasons for Currently Not Teaching: Comparison of First and Second Career

<table>
<thead>
<tr>
<th>Reason</th>
<th>First Career (n=22)</th>
<th>Second Career (n=58)</th>
<th>Total (n=80)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Already employed in another occupation</td>
<td>5 23%</td>
<td>24 41%</td>
<td>29 36%</td>
</tr>
<tr>
<td>Not able to secure job in desired geographical area</td>
<td>8 36%</td>
<td>19 33%</td>
<td>27 34%</td>
</tr>
<tr>
<td>Full-time homemaker and/or parent</td>
<td>5 23%</td>
<td>9 16%</td>
<td>14 18%</td>
</tr>
<tr>
<td>Other</td>
<td>3 14%</td>
<td>11 20%</td>
<td>14 18%</td>
</tr>
<tr>
<td>Attending graduate school</td>
<td>4 18%</td>
<td>8 14%</td>
<td>12 2%</td>
</tr>
<tr>
<td>Pay is too low in the teaching profession</td>
<td>4 18%</td>
<td>5 8%</td>
<td>9 1%</td>
</tr>
<tr>
<td>Self-employed</td>
<td>1 5%</td>
<td>6 10%</td>
<td>7 1%</td>
</tr>
</tbody>
</table>

*Graduates were asked to check all that apply so percentage does not equal 100.

*bSome other reasons given included “home business,” “took a year off,” “did not pass NTE,” “got married and moved.”

*cTotal number of persons currently not teaching is 82. Two of these persons did not indicate their reason for not teaching.
<table>
<thead>
<tr>
<th></th>
<th>Total Number of Teaching Graduates</th>
<th>100% Consumer and Homemaking</th>
<th>100% FCS Occupational and Consumer and Homemaking</th>
<th>Consumer and Homemaking and Other</th>
<th>Occupational and Other</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Career</td>
<td>125</td>
<td>91</td>
<td>9</td>
<td>13</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>73%</td>
<td>7%</td>
<td>10%</td>
<td>5%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>2nd Career</td>
<td>55</td>
<td>33</td>
<td>4</td>
<td>10</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60%</td>
<td>7%</td>
<td>18%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>124</td>
<td>13</td>
<td>23</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>69%</td>
<td>7%</td>
<td>13%</td>
<td>4%</td>
<td>1%</td>
</tr>
</tbody>
</table>

**Note.** Eighty-two graduates were not currently teaching. Twenty-four were first career and fifty-eight were second career graduates.
Thirteen percent taught a combination of both and the rest (11%) taught a combination of consumer and homemaking and occupational FCS classes and other subjects.

Most of those who were teaching (53%) taught only high school grades. Another 20% taught only middle school grades and 18% taught a combination of middle and high school grades. The remaining 9% taught elementary students, adults, or a combination of several grade levels.

Respondents were asked to indicate their level of satisfaction with their current job on a four-point scale. Overall, respondents were quite satisfied with their career choice. For those who indicated teaching as their first career, 54% were very satisfied with their current career choice. Also 54% of second career graduates were very satisfied with their current career choice. Of those who were teaching full-time FCS, 58% were very satisfied and 34% were somewhat satisfied. (Two persons who were teaching full-time FCS and one person who was not teaching did not indicate their satisfaction.) Forty seven percent of graduates were not currently teaching, (n = 38) were very satisfied and 36% (n = 29) were somewhat satisfied with their career choice. Only one person who was currently not teaching was very dissatisfied, and 13 were somewhat dissatisfied with their career choice. (see Table 9). Although no statistical test was performed, it appears that satisfaction with career choice was not related to whether a graduate was or was not currently teaching.
Table 9

Current Job Satisfaction of Graduates by First and Second Career and by Current Teaching Status

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Very Satisfied</th>
<th>Somewhat Satisfied</th>
<th>Somewhat Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Career</td>
<td>147</td>
<td>80</td>
<td>55</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>54%</td>
<td>37%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>Second Career</td>
<td>112</td>
<td>60</td>
<td>36</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>54%</td>
<td>32%</td>
<td>12%</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td>259</td>
<td>140</td>
<td>91</td>
<td>22</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>54%</td>
<td>35%</td>
<td>9%</td>
<td>2%</td>
</tr>
<tr>
<td>Teaching FCS 100%</td>
<td>158^</td>
<td>91</td>
<td>54</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>58%</td>
<td>34%</td>
<td>6%</td>
<td>2%</td>
</tr>
<tr>
<td>Teaching FCS partially</td>
<td>13</td>
<td>8</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>62%</td>
<td>38%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Teaching other subjects</td>
<td>7</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>43%</td>
<td>43%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Not teaching</td>
<td>81^</td>
<td>38</td>
<td>29</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>47%</td>
<td>36%</td>
<td>16%</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td>259</td>
<td>140</td>
<td>91</td>
<td>22</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>54%</td>
<td>35%</td>
<td>9%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Note. Two persons (*) who were teaching FCS 100% and one person (**) who was not teaching did not complete the survey item related to job satisfaction.
When comparing job satisfaction with current career choice with membership in professional organizations, 50% of those persons who did not hold membership in any organization were very satisfied, compared to 57% of those persons who did hold membership. While no statistical test was performed to provide evidence, it appears that membership in professional organizations may have a somewhat positive relationship with satisfaction (see Table 10). Comparison of job satisfaction levels as related to other variables did not indicate any clear patterns.

**Career choice decisions related to personal, family, and work lives.** Respondents were asked to indicate if teaching was their first full-time career and if not what that career was. In addition, they were asked to indicate how long they were in their previous career and whether or not they were a full-time homemaker or parent before seeking a teaching career. Second career graduates made up 43% of the sample. First careers of that group were extremely varied. Careers in retailing, marketing, and sales topped the list (n = 19) followed closely by secretarial, office management, bookkeeping, and related jobs (n = 17). Several persons (n = 15) indicated time spent in a cooperative extension career (see Table 11).

Length of time in previous careers was varied. Of those who marked this item on the survey (n = 97), 27 persons were in their first careers from 2 to 4 years, with 23 persons indicating 9 to 19 years (see Table 12). There were 29% of the respondents who indicated they chose to teach after being a full-time homemaker and/or parent. Forty-one percent of second career graduates fell into this group, while only 20% of first career graduates did.
Table 10

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Very Satisfied</th>
<th>Somewhat Satisfied</th>
<th>Somewhat Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>No participation in</td>
<td>104</td>
<td>52</td>
<td>38</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>organizations</td>
<td></td>
<td>50%</td>
<td>37%</td>
<td>12%</td>
<td>1%</td>
</tr>
<tr>
<td>Participation in one or</td>
<td>155</td>
<td>88</td>
<td>53</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>more</td>
<td></td>
<td>57%</td>
<td>34%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>Total</td>
<td>259</td>
<td>140</td>
<td>91</td>
<td>22</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>54%</td>
<td>35%</td>
<td>9%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Note. Three persons did not complete the survey item related to job satisfaction.
Table 11

First Careers of the Second Career Graduates

<table>
<thead>
<tr>
<th>Career</th>
<th>Number</th>
<th>Career</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retailing/Marketing/Sales</td>
<td>19</td>
<td>Ministry</td>
<td>2</td>
</tr>
<tr>
<td>Secretarial/Office Management/Bookkeeping</td>
<td>17</td>
<td>Social Work</td>
<td>2</td>
</tr>
<tr>
<td>Cooperative Extension Service</td>
<td>15</td>
<td>Interior Design</td>
<td>2</td>
</tr>
<tr>
<td>Homemaker and/or Parent</td>
<td>9</td>
<td>Fashion Designer</td>
<td>1</td>
</tr>
<tr>
<td>Food Service/Nutrition Programs</td>
<td>8</td>
<td>School Psychologist</td>
<td>1</td>
</tr>
<tr>
<td>Banking</td>
<td>6</td>
<td>Manual Labor</td>
<td>⬤</td>
</tr>
<tr>
<td>Business Owner/Self-Employed</td>
<td>4</td>
<td>Water Management</td>
<td>1</td>
</tr>
<tr>
<td>Nursing/Medical</td>
<td>4</td>
<td>Surveyor</td>
<td>1</td>
</tr>
<tr>
<td>Graduate School</td>
<td>3</td>
<td>Tool Maker</td>
<td>1</td>
</tr>
<tr>
<td>Insurance</td>
<td>2</td>
<td>Early Childhood Education</td>
<td>1</td>
</tr>
<tr>
<td>Professional Youth Organization Representative</td>
<td>2</td>
<td>Flight Attendant</td>
<td>1</td>
</tr>
<tr>
<td>Hair Stylist/Cosmetologist</td>
<td>2</td>
<td>Factory Worker</td>
<td>1</td>
</tr>
<tr>
<td>Instructor/Teacher Aide</td>
<td>2</td>
<td>Veterinary Technician</td>
<td>1</td>
</tr>
<tr>
<td>Real Estate</td>
<td>2</td>
<td>Politician</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 12

**Length of Time in First Careers of Second Career Graduates**

<table>
<thead>
<tr>
<th>Length of Time</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year or less</td>
<td>19</td>
</tr>
<tr>
<td>2 to 4 years</td>
<td>27</td>
</tr>
<tr>
<td>5 to 8 years</td>
<td>21</td>
</tr>
<tr>
<td>9 to 19 years</td>
<td>23</td>
</tr>
<tr>
<td>20 years and over</td>
<td>7</td>
</tr>
</tbody>
</table>
Analysis of Factors Identified by Respondents

Factors influencing teaching as a career choice. Graduates were asked to indicate when they made their initial decision to pursue teacher certification in FCS. Only 22% made their decision while in middle or high school. Of those (53%) who made their decision when in college, 37% did so in their freshman or sophomore year, and 16% did so in their junior or senior year. Another 21% made their career decision after receiving a bachelor's degree or after working in another occupation. Thirty percent of second career graduates made their choice after working in another occupation, compared with only 3% of first career graduates (see Table 13).

Respondents were asked to choose three factors, from a list of twelve, which most influenced their decision to seek teacher certification, and to rank them in order of importance. Upon reviewing the first 80 respondents surveys, it became clear that several persons did not rank their responses in a consistent manner. There may have been some confusion regarding the instructions for ranking the items. Therefore, for the purposes of this data presentation, rankings were collapsed and an item was only included if it was one of their three choices.
Table 13

When Career Choice Decision to be a FCS Teacher Was Made

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Middle School</th>
<th>High School</th>
<th>College Fresh/Soph</th>
<th>College Jr/Senior</th>
<th>After Bachelor's</th>
<th>After Working</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Career</td>
<td>149</td>
<td>5</td>
<td>35</td>
<td>66</td>
<td>23</td>
<td>11</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3%</td>
<td>24%</td>
<td>44%</td>
<td>16%</td>
<td>7%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Second Career</td>
<td>112</td>
<td>1</td>
<td>16</td>
<td>31</td>
<td>19</td>
<td>5</td>
<td>34</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1%</td>
<td>14%</td>
<td>28%</td>
<td>17%</td>
<td>5%</td>
<td>30%</td>
<td>5%</td>
</tr>
<tr>
<td>Total</td>
<td>261</td>
<td>6</td>
<td>51</td>
<td>97</td>
<td>42</td>
<td>16</td>
<td>38</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2%</td>
<td>20%</td>
<td>37%</td>
<td>16%</td>
<td>6%</td>
<td>15%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Note. One second career person did not respond.
The factor most often chosen as influencing graduates' career decisions to seek teacher certification was "I like working with young people" (63% of respondents), followed by "The schedule is attractive" (45%), "The example of my own teachers inspired me" (35%), "I like helping people" (33%) and "I feel that teaching is my calling in life" (32%). The factor which was chosen the least by graduates as an influence on their choice to seek teacher certification was "My fellowship/scholarship required it" (1%) (see Figure 2).

**Factors influencing choice of FCS as a field of study.** Graduates were asked to choose three factors, from a list of thirteen, which most influenced their decision to choose FCS as their teaching subject area, and to rank those three. Again rankings have been collapsed as previously noted. The reason most often chosen was "I am interested in FCS subject matter" (84% of respondents). This was followed by "I want to help families" (46%), and "My secondary FCS teacher(s) influenced me" (36%). It is interesting to note that although secondary FCS teachers influenced career choice, the factor least often chosen to affect graduates' career decision to choose FCS subject area was "my high school counselor influenced me" (2%) (see Figure 3).

**Values influencing choice of teaching as a career.** Graduates were asked to choose three personal values, from a list of twelve, that most influenced their decision to seek teacher certification, and to rank those three. Again, rankings were collapsed for this review. The value most often indicated was "helping other people" (66% of respondents), followed closely by "family" (61%), "professional satisfaction" (55%), and "creativity"
(48\%). The values which received the least amount of response were "material comfort and wealth" and "recognition from others" (3\% each) (see Figure 4).
Factors

- I like working with young people.
- The schedule is attractive.
- The example of my own teachers inspired me.
- I like helping people.
- I feel that teaching is my calling in life.
- Teachers can bring about social change.
- Family members were teachers.
- Teaching is a relatively secure job.
- Teaching is a job to fall back on.
- Other
- I needed a major and this was available.
- My fellowship required it.

Figure 2. Factors which influenced graduates' decision to seek teacher certification
Factors

- I am interested in FCS subject matter.
- I want to help families.
- My secondary FCS teacher(s) influenced me.
- My college instructors influenced me.
- I was already in a FCS major and decided to be a teacher.
- My experience in FHA/HERO influenced me.
- Other
- Other members of my family influenced me.
- My friends influenced me.
- A family member is/was an FCS teacher.
- Participation in FCS professional organization(s) influenced me.
- I received scholarships or grants specifically for FCS education.
- My high school counselor influenced me.

Figure 3. Factors which influenced graduates' decision to choose Family and Consumer Sciences (FCS) as teaching subject area.
Figure 4. Personal values which influenced graduates' decision to seek teacher certification.
Teaching as a second career choice. Because 43% of respondents chose teaching as a second career, it was important to determine if their responses to career choice factors differed significantly from those who chose teaching as their first career. Regarding factors which influenced graduates' decisions to become a teacher, chi square statistics showed significance only on "The example of my own teachers inspired me." This was chosen significantly more often by first career graduates than by second career graduates, $x^2 (1) = 14.32, \ p < .05$ (see Table 14).

Regarding reasons for choosing FCS as a teaching subject, first career graduates chose "My secondary FCS teacher(s) influenced me", $x^2 (1) = 11.73, \ p < .05$, and "My experience in FHA/HERO influenced me", $x^2 (1) = 5.60, \ p < .05$, significantly more often than second career graduates. Second career graduates chose "others" $x^2 (1) = 4.79, \ p < .05$, significantly more than first career graduates (see Table 15). Some "others" included: "love the life skills it teaches," "my experience in 4-H or extension influenced me," "needed in schools (to teach) values, and morals," and "important job to teach teens for their future."

Regarding values which influenced a career decision, "friendship" was chosen significantly more often by first career graduates, $x^2 (1) = 6.73, \ p < .05$ (see Table 16).

Although there were no significant differences between first and second career graduates for any other factors, some distinct profiles of the respondents emerged through cluster analysis.

36
Table 14

Differences Between First and Second Career Graduates on Influencing Factors for Seeking Teacher Certification

<table>
<thead>
<tr>
<th>Influencing Factors</th>
<th>Percent of Respondents</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First Career</td>
<td>Second Career</td>
<td>$x^2$</td>
<td>$p$</td>
<td></td>
</tr>
<tr>
<td>I like working with young people.</td>
<td>63</td>
<td>58</td>
<td>.75</td>
<td>.39</td>
<td></td>
</tr>
<tr>
<td>The example of my own teachers inspired me.</td>
<td>42</td>
<td>20</td>
<td>14.32</td>
<td>.00***</td>
<td></td>
</tr>
<tr>
<td>The schedule is attractive.</td>
<td>40</td>
<td>50</td>
<td>2.77</td>
<td>.10</td>
<td></td>
</tr>
<tr>
<td>I like helping people.</td>
<td>36</td>
<td>31</td>
<td>.80</td>
<td>.37</td>
<td></td>
</tr>
<tr>
<td>I feel that teaching is my calling in life.</td>
<td>28</td>
<td>31</td>
<td>.27</td>
<td>.60</td>
<td></td>
</tr>
<tr>
<td>Teachers can bring about social change.</td>
<td>27</td>
<td>27</td>
<td>.00</td>
<td>.10</td>
<td></td>
</tr>
<tr>
<td>Family members were teachers.</td>
<td>19</td>
<td>17</td>
<td>.16</td>
<td>.69</td>
<td></td>
</tr>
<tr>
<td>Teaching is a relatively secure job.</td>
<td>15</td>
<td>17</td>
<td>.23</td>
<td>.63</td>
<td></td>
</tr>
<tr>
<td>Teaching is a job I can fall back on.</td>
<td>12</td>
<td>15</td>
<td>.52</td>
<td>.47</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>17</td>
<td>2.71</td>
<td>.10</td>
<td></td>
</tr>
<tr>
<td>I needed a major and this was available.</td>
<td>3</td>
<td>3</td>
<td>.00</td>
<td>.94</td>
<td></td>
</tr>
<tr>
<td>My fellowship/scholarship required it.</td>
<td>1</td>
<td>2</td>
<td>.62</td>
<td>.43</td>
<td></td>
</tr>
</tbody>
</table>

* $p<.05$
** $p<.01$
*** $p<.001$
Table 15

Differences Between First and Second Career Graduates on Influencing Factors for Choosing Family and Consumer Sciences

<table>
<thead>
<tr>
<th>Influencing Factors</th>
<th>Percent of Respondents</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First Career</td>
<td>Second Career</td>
<td>$x^2$</td>
<td>$p$</td>
<td></td>
</tr>
<tr>
<td>I am interested in FCS subject matter.</td>
<td>84</td>
<td>85</td>
<td>.04</td>
<td>.84</td>
<td></td>
</tr>
<tr>
<td>My secondary FCS teacher(s) influenced me.</td>
<td>45</td>
<td>24</td>
<td>11.73</td>
<td>.00***</td>
<td></td>
</tr>
<tr>
<td>I want to help families.</td>
<td>42</td>
<td>51</td>
<td>2.15</td>
<td>.14</td>
<td></td>
</tr>
<tr>
<td>My college instructors influenced me.</td>
<td>27</td>
<td>22</td>
<td>.85</td>
<td>.36</td>
<td></td>
</tr>
<tr>
<td>I was already in a FCS major and decided to be a teacher.</td>
<td>22</td>
<td>27</td>
<td>.82</td>
<td>.37</td>
<td></td>
</tr>
<tr>
<td>My experience in FHA/HERO influenced me.</td>
<td>21</td>
<td>10</td>
<td>5.60</td>
<td>.01**</td>
<td></td>
</tr>
<tr>
<td>Other members of my family influenced me.</td>
<td>13</td>
<td>11</td>
<td>.20</td>
<td>.66</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>19</td>
<td>4.79</td>
<td>.03*</td>
<td></td>
</tr>
<tr>
<td>My friends influenced me.</td>
<td>8</td>
<td>8</td>
<td>.02</td>
<td>.90</td>
<td></td>
</tr>
<tr>
<td>A family member is/was a FCS teacher.</td>
<td>8</td>
<td>5</td>
<td>.59</td>
<td>.44</td>
<td></td>
</tr>
<tr>
<td>Participation in FCS professional organization(s)</td>
<td>6</td>
<td>4</td>
<td>.08</td>
<td>.67</td>
<td></td>
</tr>
<tr>
<td>influenced me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I received scholarships or grants specifically for FCS education.</td>
<td>5</td>
<td>2</td>
<td>1.83</td>
<td>.18</td>
<td></td>
</tr>
<tr>
<td>My high school counselor influenced me.</td>
<td>2</td>
<td>2</td>
<td>.04</td>
<td>.85</td>
<td></td>
</tr>
</tbody>
</table>

* $p<.05$
** $p<.01$
*** $p<.001$
Table 16

Differences Between First and Second Career Graduates on Personal Values which Influenced Decision to Seek Teacher Certification

<table>
<thead>
<tr>
<th>Influencing Values</th>
<th>Percent of Respondents</th>
<th>$x^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First Career</td>
<td>Second Career</td>
<td></td>
</tr>
<tr>
<td>Helping other people</td>
<td>71</td>
<td>60</td>
<td>3.44</td>
</tr>
<tr>
<td>Family</td>
<td>61</td>
<td>62</td>
<td>.05</td>
</tr>
<tr>
<td>Professional satisfaction</td>
<td>55</td>
<td>54</td>
<td>.01</td>
</tr>
<tr>
<td>Creativity</td>
<td>43</td>
<td>53</td>
<td>2.75</td>
</tr>
<tr>
<td>Pleasure, new experiences</td>
<td>21</td>
<td>23</td>
<td>.16</td>
</tr>
<tr>
<td>Religion, spiritual fulfillment</td>
<td>11</td>
<td>19</td>
<td>3.34</td>
</tr>
<tr>
<td>Friendship</td>
<td>11</td>
<td>3</td>
<td>6.73</td>
</tr>
<tr>
<td>Working for peace, reconciliation</td>
<td>5</td>
<td>3</td>
<td>.29</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>4</td>
<td>.01</td>
</tr>
<tr>
<td>Recognition from others</td>
<td>3</td>
<td>3</td>
<td>.15</td>
</tr>
<tr>
<td>Social justice, equality</td>
<td>3</td>
<td>5</td>
<td>1.04</td>
</tr>
<tr>
<td>Material comfort, wealth</td>
<td>2</td>
<td>5</td>
<td>1.89</td>
</tr>
</tbody>
</table>

*p < .05

**p < .01

***p < .001
Group profiles. Cluster analysis was used to identify groups of respondents by how they share in common similar responses to the multiple career choice variables. It was done to determine which variables distinguish graduates from one another and to determine if specific profiles of graduates could be identified. The cluster analysis technique used for this study was a K-means algorithm created by Hartigan and Wong. It was used in Number Cruncher Statistical System (NCSS). NCSS standardized the data and sorted the observations "according to their distance from the overall mean" (Hintze, 1992, p 211). The researcher then noted which variables had a value of .4 or above, which is the typical research procedure (J. D. Moran, personal communication, December 17, 1996). This was done to determine which factors and values were chosen by respondents that discriminated the profiles of graduates from one another.

Through the first stage of cluster analysis, it was recognized that three variables were common to nearly all respondents. These were "interest in FCS subject matter," "family," and "helping people." After accounting for these variables, the second stage of cluster analysis revealed five differentiated groups. They are significantly different overall as a group when comparing first and second career graduates, $\chi^2 (4) = 15.38, p < .01$ (see Table 17). The group profiles are labeled thus: (1) Altruistically Motivated (33% of respondents), (2) Interest, Flexibility and Variety of Career (29% of respondents), (3) Influenced by Secondary School Experience (27% of respondents), (4) Socially Conscious and Friend Influence (10% of respondents), and (5) Influenced by College Experience (1% of respondents).
Table 17

Cluster Analysis Profiles: Differences Between First and Second Career Graduates

<table>
<thead>
<tr>
<th>Profiles</th>
<th>First Career (n=149)</th>
<th>Second Career (n=113)</th>
<th>Total (n=262)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group One</td>
<td>43</td>
<td>45</td>
<td>88</td>
</tr>
<tr>
<td>Altruistically Motivated</td>
<td>29%</td>
<td>40%</td>
<td>33%</td>
</tr>
<tr>
<td>Group Two</td>
<td>37</td>
<td>38</td>
<td>75</td>
</tr>
<tr>
<td>Interest, Flexibility and Variety of Career</td>
<td>27%</td>
<td>33%</td>
<td>29%</td>
</tr>
<tr>
<td>Group Three</td>
<td>54</td>
<td>17</td>
<td>71</td>
</tr>
<tr>
<td>Influenced by Secondary School Experience</td>
<td>36%</td>
<td>15%</td>
<td>27%</td>
</tr>
<tr>
<td>Group Four</td>
<td>14</td>
<td>11</td>
<td>25</td>
</tr>
<tr>
<td>Socially Conscious and Friend Influence</td>
<td>9%</td>
<td>1%</td>
<td>10%</td>
</tr>
<tr>
<td>Group Five</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Influenced by College Experience</td>
<td>&lt;1%</td>
<td>2%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Note. $\chi^2(4)=15.38$, $p=.004$
The first group was characterized by their willingness to help people, specifically families and young people. They indicated that the teaching schedule is attractive, and they valued creativity and professional satisfaction. This group included 29% of the first career graduates and 40% of the second career graduates.

Group two was characterized by pleasure and new experiences. Twenty-five percent of first career graduates and 33% of second career graduates were in this group. They also indicated that attractiveness of teaching schedule, creativity and professional satisfaction were important.

Group three was characterized by their enjoyment of working with young people, and the influences of their own teachers, FCS teachers, and FCS student organization experiences in secondary school. They also indicated that creativity and professional satisfaction were important influences on their career decision. Thirty-six percent of the first career graduates and 15% of second career graduates fell into this group.

The fourth group was characterized by influence of friends and the feeling that teachers can bring about social change. They also indicated that the attractiveness of the schedule, enjoyment of working with young people, and professional satisfaction were important factors. Nine percent of first career graduates and 10% of second career graduates were in this group.

The small fifth group included only three persons (1% of respondents). These persons indicated that their college instructors influenced them, they were already in an FCS major and decided to teach, their fellowship or scholarship required it, and teaching is
a job to fall back on. Less than 1% of first career and 2% of second career graduates were in this group. See Table 18 for a complete description of each group’s profile.
Table 18

Cluster Analysis Group Profiles by Distinguishing Factors

<table>
<thead>
<tr>
<th>Group Profiles</th>
<th>Distinguishing Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group One</td>
<td></td>
</tr>
<tr>
<td>Altruistically Motivated</td>
<td>I like helping people.</td>
</tr>
<tr>
<td></td>
<td>The schedule is attractive.</td>
</tr>
<tr>
<td></td>
<td>I like working with young people.</td>
</tr>
<tr>
<td></td>
<td>I want to help families.</td>
</tr>
<tr>
<td></td>
<td>Creativity</td>
</tr>
<tr>
<td></td>
<td>Professional satisfaction</td>
</tr>
<tr>
<td>Group Two</td>
<td></td>
</tr>
<tr>
<td>Interest, Flexibility, and Variety of</td>
<td>The schedule is attractive.</td>
</tr>
<tr>
<td>Career</td>
<td>Creativity</td>
</tr>
<tr>
<td></td>
<td>Professional satisfaction</td>
</tr>
<tr>
<td></td>
<td>Pleasure, new experiences</td>
</tr>
</tbody>
</table>

continued
Table 18 continued

| Group Three | I like working with young people. |
| Secondary Experience | The example of my own teachers inspired me. |
| | My secondary FCS teacher(s) influenced me. |
| | My experience in FHA/HERO influenced me. |

| Group Four | Teachers can bring about social change. |
| Socially Conscious and Friend Influenced | The schedule is attractive. |
| | I like working with young people. |
| | My friends influenced me. |

| Group Five | Teaching is a job to fall back on. |
| College Experience Influenced | My fellowship/scholarship required it. |
| | My college instructors influenced me. |
| | I was already in an FCS major and decided to be a teacher. |

* Three factors which were common to all profile groups based on the cluster analysis were: “I am interested in FCS subject matter,” “Family,” and “Helping other people.”
Discussion

The data clearly suggest that persons who choose teaching as a career and FCS as a teaching field cannot be described as fitting one typical profile. There are two different groups to target for marketing and recruitment. They are the first career group and the second career group. The results of this study show differences between first and second career graduates on personal, educational, and employment demographics. To summarize, the first career graduates compared with second career graduates were younger, more often made their career decision in secondary school, were more likely to be currently teaching in secondary FCS programs, and were more active in professional organizations. About one-third of first career graduates were single, and two-thirds were married. Second career graduates were older, over three-fourths were married, and they had more children living in their home than first career graduates. Over half of the second career graduates, although certified to teach, were currently not teaching.

Although only 22 persons were somewhat dissatisfied and 6 persons very dissatisfied with their career choice, 16 of these 28 were second career graduates. Because one-half of those dissatisfied with their career choice were not currently teaching, their dissatisfaction may well have been related to their lack of employment in the area for which they had prepared or they may not have sought employment after deciding they did not want to teach. As Serow and Forrest (1994) found, socioeconomic concerns often prompted second career choice. Job commitment or intent to stay in teaching for second career students, as reported by Serow (1993) and Su (1993), may also be a factor in the current study for why 51% (n = 58) of the second career graduates were not teaching.
They may not have found the "right teaching position," one to which they could feel committed both for socioeconomic reasons (i.e. adequate salary and benefits) and for long term commitment. Second career persons may also have more limited geographical mobility due to family roles and responsibilities. Also, as movement into teaching as a second career is related to dissatisfaction with previous careers as noted by Daniel and Ferrel (1991), perhaps expectations for satisfaction in teaching as a second career are somewhat exaggerated.

Gender role expectations may affect career choice decisions for women. Super (1990) noted that perhaps life-stage theory may need to be reconceptualized for women. With relatively few males as FCS teachers, perhaps this career choice is more socially acceptable and developmentally appropriate for women. Super noted that "salience of the work role," not gender, helps "determine career maturity" (1990, p. 234). Career maturity, as described by Super, includes the person's ability to cope with all the societal expectations of both biological and social responsibilities (1990).

Because of the increase in responsibilities women have as they move further through the life span, it was not surprising to find a recognition of the flexibility of a teacher's work schedule as an important influence on career choice. This may be a result of gender role expectations and responsibilities, as 99% of respondents were female and 40% had children living in the home. As Vincenti (1993) noted, females traditionally have been and continue to be the primary caretakers of the multiple household and family responsibilities. A career in teaching better fits daily and year round schedules of the
school age child and is more compatible for those teacher who are parents compared with most other careers.

An overwhelming interest in and commitment to the importance of FCS subject matter strongly influenced both first and second career graduates' career choices. This may be related to the integrated nature of FCS. Although varied in foci, scope, and breadth of the discipline, a common theme is the well-being of individuals and families, as described in the Conceptual Framework for the 21st Century, "We believe in families as the fundamental social unit" (American Home Economics Association, 1994). It appears that the interest in the subject matter combined with the recognition of the value of teaching FCS, and how it helps young people and families, made the majority of respondents in this study satisfied with their career choice.

The factors most often chosen by respondents across all profiles as important influences generally reflected an altruistic motivation with a concern for families and helping people. This was similar to the findings from the National Study of Educators reported by Su (1993), which indicated intrinsic rewards as more important than extrinsic rewards for career motivation. Others have also found intrinsic rewards to be more important than extrinsic ones for career motivations of teachers (Daniel & Ferrel, 1991; Marso & Pigge, 1994; Serow, 1993). This was in contrast to the suggestion that many FCS teachers are teaching solely for the purpose of a paycheck (Ley, 1993). Ley further noted that commitment is more than just interest, rather it requires action, and that those actions should be made on the basis of one's beliefs (1993).
Action based on one's own beliefs is supported by the findings of this study. Several respondents wrote personal comments on the surveys that reflected a belief that young people especially need what FCS teachers provide. One respondent wrote, "Except for parenting, I don't think there is a job more important than teaching. It deals with the future". Another wrote,

I saw a need for values, morals, responsibility, leadership, etc. in our classrooms and I wanted to be a part of that. I love what I do, and I fully support the FCS field. I believe it is essential for kids to learn and practice the curriculum that we teach. I feel so rewarded every day because I know that I am making a difference in someone's life!

It is commitment that partly separates those who view teaching as a job and those who view it as a calling, a profession, a career. Serow (1994) and Bogue (1991) also found "a calling to teach" as a strong motivation.

Across the two larger categories of first and second career graduates, there were five distinct group profiles as described in the cluster analysis. The groups differed on career motivations and factors influencing career choice. Those identified as "Influenced by Secondary School Experience" indicated their own teachers were strong influences on their career choice decision, and this parallels findings of several other studies (Bullough, 1989; Kidder, 1989; Marso & Pigge, 1994; Su, 1993).

The present study's findings support those found by Serow (1993, 1994). Nearly 70% indicated one of the reasons they chose teaching was because they wanted to help people. This is a common motivation for those seeking careers in teaching. It is described
as "caring" by Powell and Weaver (1993). An overwhelming interest in FCS subject matter combined with the values of "helping other people" and "family" by respondents in the current study follows Serow's (1993) extenders and subject-oriented groupings. Many of the second career respondents with diverse first career backgrounds could be seen as rectifiers, and many also indicated the appreciation for the teaching schedule so could be classified as practical (Serow, 1993).

A person's age, related to life-stages, as indicated by this study, seems to have made a difference in career choice motivations. One respondent wrote, "I believe you need to reach out to the age 30 to 50 women to enter into the FCS field. Women this age have begun to make a stand for principles and beliefs. They also have the fortitude to follow through." Several respondents indicated their career choice was a complement to their expectations as a parent and a homemaker. Older, second career graduates indicated twice as often as first career graduates that their career choice decision was made after being a full-time homemaker or parent. Examples of the motivation described in the written comments of those who were teaching and balancing family responsibilities included: "the needs of my own children," "it's a job I could do and be home with the kids in the summer," "nurturing," "after years as a parent," and "natural place to go... homemaker and parent for 14 years." These comments verify the importance of the attractive schedule as a career motivation. They also indicate a need to nurture as a career motivation for teachers. This was also found in other studies (Builough, Knowles, & Crow, 1992; Kidder, 1989). Therefore, a career choice to teach FCS seems to be a
natural fit for some respondents as it facilitates their own balancing of work and family responsibilities.

Given the national scope of the teacher shortage and the demand being much greater than the supply, it was surprising to find that almost one-third of recent graduates were not teaching. Although this study did not seek to identify whether there was a teacher shortage, the finding that so many recent graduates were not teaching may be contributing to the shortage problem. Current enrollment nationally in FCS education programs was 1,452 (for all responding schools, 58% of schools nationally) for fall 1995 (FAEIS, 1996). Even if all graduate and 30% of those do not teach, as would parallel those graduates in the current study, the supply issue remains very serious.
Conclusions and Implications

Taking steps to develop strategies for recruiting FCS teachers to help address the teacher shortage will require two separate foci. The first is to recruit those persons who are seeking teaching as a second career. With 44% of respondents indicating this as a second career choice, and with the need to get teachers prepared quickly to address the teacher shortage, this should be the primary focus for short-term recruitment efforts. Many of these persons may already have a degree or some education toward a degree. Some may be working in related industries or businesses. Some may be homemakers and/or parents who value the flexibility of the teaching schedule and would like a career to help other families.

Another target group for recruitment of second career persons are those in FCS cooperative extension and 4-H positions as several graduates indicated this as their first career. These persons already have a commitment to the FCS profession, most likely have similar educational preparation, and could be easily prepared for classroom teaching. Additionally, as this study indicated, retailing, marketing, and sales was the type of first career most often indicated by second career respondents. Timing for recruitment is also important. As this study shows most graduates make their career choice while in college. Targeting students in college programs related to the fields described as first careers may be helpful. Although often thought of as more of a business focus, it is interesting to see that so many persons from this first career focus have chosen a family-focused second career. This is probably a result of changes in their own personal lives that makes teaching more appealing.
The second focus should be on recruiting those who come to seek teacher certification and who enjoy FCS from more traditional paths, such as the group identified as those "Influenced by Secondary School Experience". This finding supports those of the National Study of Educators, which indicated that socialization by their own teachers was an important influence (Su, 1993). This may be done by strengthening recruitment efforts through current FCS teachers, programs, and student organizations. A national study by Burge and Stewart (1991) examined FCS teacher educators' opinions regarding recruitment issues. Their recommendations included targeting nontraditional and returning students, students in related disciplines, undeclared majors, males, and members of youth organizations. The findings of this current study also support targeting nontraditional second career graduates. This study's results also indicate a need for strengthened efforts by teachers to educate guidance counselors regarding the career opportunities and the need for FCS teachers. Erwin (1995) found that guidance counselors' perceptions of FCS programs comes largely from the marketing or lack of it by the FCS teachers in their schools.

The results of this study support the marketing and recruitment strategies proposed by the FCS educators at the 1995 AVA Research Pre-session on FCS teacher supply and demand. These include "target returning adults, target FHA/HERO members, involve all stakeholders, include FCS teachers, teacher education students, and other members of the profession in efforts to recruit teachers, build and maintain quality programs, promote the positive aspects of teaching, and develop a comprehensive marketing plan" (Couch, 1995).
Although recruitment of persons into FCS teacher-education programs may help to alleviate the teacher shortage, even larger issues are the placement and retention of FCS teachers and the development of short-term certification programs. Some geographical areas do not have shortages, as one respondent who was not teaching described, "My only complaint is the lack of openings in my area." With so many recent graduates not currently teaching, it may be an issue of location of available jobs.

FCS teachers and teacher educators themselves may have contributed to the decreased enrollments in FCS teacher-education programs. As one respondent who pursued a degree in clothing and textiles before returning to get her certification noted, "When I graduated in 1989, I was told 'you'll never get a job; those home economics jobs are few and far between.' I believe that this is what discouraged students from entering the field." Increasing positive marketing by teacher educators and teachers about the teaching positions available, provision of placement and retention services, and mentoring for new teachers would be helpful.

Stereotypical notions of what FCS is and a lack of effective marketing of programs by FCS teachers have also contributed to the shortage. One second career respondent who was currently teaching in a special reading program has not been able to secure a FCS teaching position in her geographical location. However, she wrote, "I may not change...I have found that a major contribution to the shortage of FCS teachers is that high school students are directed away from FCS classes if they are college-bound. The students who are most encouraged to take these courses tend to be lower academic and
teen mothers. Our profession is not among the popular choices of today's women—too traditional." This identity confusion is further compounded by the perceptions and beliefs of others who influence students. As one high school guidance counselor's remarks in Erwin's (1995) study showed, "Our home economics program has a good opportunity for you to become acquainted with some subject areas that would help you be a better prepared young lady, to make yourself look more attractive, to learn how to prepare a meal for your boyfriend and later your family, teach you some good grooming techniques, and it would also teach you how to buy the products for your home...." (p. 88). A respondent in the current study who is currently teaching FCS wrote, "I am very concerned with the future of FCS. Students still picture it as cooking and sewing. We need to educate them, let them know we are teaching nutrition, conflict management, relationships, etc." Despite confusion over professional identity and continuing stereotypes, some have continued with their career choice. Although "discouraged by just about everyone" for seeking a career as a FCS teacher a respondent wrote, "The main reason for choosing FCS teaching for me was my love for the curriculum."

It is that commitment to the FCS profession and a desire to help others that make those who select this career choice unique. However, to make any real impact on the teacher shortage, FCS teachers, teacher-educators, and administrators all need to have an awareness of the concerns of professional identity and unity and make concerted efforts to cooperatively market the value and necessity of the continuation of the secondary school programs for individuals and families. Teachers of family and consumer sciences are prepared to teach in all specialty areas of the field. They touch the lives of many youth
and families by empowering them with skills to balance the multiple roles they play as part of a family, community, and work environment. Persuading both FCS teacher educators and FCS teachers that what they do is important and that the supply issue is serious is not enough to make the change that is needed. Persuading vocational directors, superintendents, and other decision makers of the benefits FCS teachers bring to youth and families and of the reality of the supply issue, then getting them to take action needs to be an important focus of marketing efforts.

The results of this study indicate several possible recommendations for further research and implications for policy changes. To better determine the geographical locations of teacher shortage needs, more detailed comprehensive supply and demand studies should be conducted. Hearing that there is a national teacher shortage means little to those teachers who have difficulties finding positions in the geographical location where they want to live or with limited geographical mobility. They may in turn discourage others from going into the field. The teacher shortage may be more an issue of location where the jobs are may not be where the recent graduates want to be. Maintaining comprehensive data banks of teacher supply and demand information, including geographical locations and long term projections, are recommended by several studies as preventive and proactive measures (Draper, 1988; Davis, 1991; Parshall, 1990).

A review of current recruitment programs and placement strategies would facilitate the development of more productive recruitment efforts. The teacher shortage and related impact this has on the profession and on the individuals and families it serves cannot be ignored. A policy recommendation agreed to by the AVA Family and Consumer Sciences
Education Division Policy and Planning Committee to establish a national task force to address the issue of FCS teacher supply and demand is supported by the results of this study. However, a more comprehensive effort at local and state levels to address local needs through cooperation with local and state colleges and universities and state certification boards may have more direct impact and success. More coordination across states would exist if state licensing barriers did not exist. Articulation agreements between high schools and community colleges with colleges and universities may facilitate recruitment of transfer students (Collins, Kellett, Miller, & Fahm, 1993). There should be a renewed effort by advisors, administrators, and faculty of colleges and universities with FCS programs to advise students to pursue teacher certification. This is supported by Williamson, Balogun, and Redick (1995) who recommended active marketing by administrators.

Strategies such as those described previously should be coupled with efforts to promote available scholarships and ensure their continuance, as nearly half of the graduates in the current study indicated scholarships and grants as one way their education was financed. Some of the graduates surveyed in this study were aware of the teacher shortage, while others were not. One respondent wrote, "I would like to see FCS recognized as a shortage area so we can gain help with school expenses." Another wrote, "I personally feel that more scholarships and funding in FCS would increase students and professional interest." Sarason (1993) suggests that economics may be hindering many who would like to teach from doing so.
In addition to financial incentives like scholarships, local and state areas where shortages are greatest may need to provide forgivable loan options which require graduates to teach for a certain number of years in the locations where need is greatest, in return for the loan investment, as was reported by Ancarrow (1991) and the National Center for Research in Vocational Education (NASDSE) (1990). In addition, follow-up professional development and advancement opportunities for these teachers would facilitate greater retention rates. Other financial incentives like reduced housing costs may encourage recent graduates to relocate to where the jobs are. These could be funded through community groups, parent teacher associations, or cooperative programs with school boards and local businesses.

The modes of recruitment of the past, especially the core class requirements for colleges of FCS, may need to be reexamined. As Moran (1993) suggested, there may be a need for an identifiable common body of knowledge for all students. The results of this study indicated that respondents had an interest in FCS subject matter and a commitment to helping families. Colleges of FCS and related disciplines have a concentrated number of possible candidates for recruitment into FCS teacher-certification programs. The results of this study clearly show that most FCS education graduates make their initial career choice while in college. Re-configuration of programs to allow easy access for students into certification programs might include add-on licensure. Some school districts have used retraining, or lateral movement, for teachers to provide qualified teachers more quickly in times of shortages (Ancarrow, 1991; Carr, 1995).
Although there is a national trend to move to 5th year or master’s degree programs for teacher certification, in times of serious teacher shortages adaptations may need to be made including alternative means of certification. The 5th-year or master’s degree programs do provide more opportunities for some second career graduates who may already have a related undergraduate degree, but they are not conducive to short-term recruitment needs. Although bachelor’s degree programs were most often indicated by recent graduates as the type of program through which they were certified, such degree programs typically have classes only in the daytime and may not be conducive to older, second-career graduates who have to support themselves and their families while getting a degree. This is especially difficult during the student teaching or internship which includes typically a semester or even a whole academic year of practice teaching without pay before receiving certification. This may be a considerable barrier to second career graduates with families.

Further research of a qualitative nature to determine why so many recent graduates are not teaching may help FCS teacher educators and administrators develop placement and retention strategies. Such research might also facilitate development of better professional support and continuing education programs for new teachers and provide suggestions for alternative certification programs. Further suggestions for research include longitudinal studies of these graduates’ career development over their life-span including career preparation, number of careers, job satisfaction, length of time in careers, and influences of personal, family, and life stage factors. In addition, research that seeks
to identify reasons why some individuals who were formerly majors in FCS education, changed their majors, may provide additional insight to career motivations.

In summary, based upon the outcomes of this study and the literature reviewed, seven recommendations for the field are: (1) development of focused recruitment plans marketed to specific target audiences, both first and second career, as previously described, (2) development of a positive image at the secondary level with a focused purpose, (3) further examination of the supply and demand of FCS teachers, to determine if it is largely an issue of location, (4) development of alternative certification programs by taking the training to those in critical need locations for short-term shortage needs, (5) development of long-term goals for meeting FCS teacher supply needs at all levels, including better cooperative local and state training efforts by teachers, teacher educators, administrators, and governing agencies, (6) creating policy changes in licensure requirements to allow more reciprocity and thus remove barriers across state lines, and (7) strengthening placement and retention efforts and providing on-going professional development for new FCS teachers.
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Appendix A

Literature Review
Literature Review

The following review of literature covers six research areas that provide background and substance for the study: (1) the family and consumer sciences (FCS) teacher shortage, (2) career choice motivations of teachers, (3) second career teachers and implications for recruitment, (4) the life-span perspective of career development theory, (5) the influence of professional identity in FCS and teacher-education reform issues, and (6) alternative strategies to address the teacher shortage. The present study offers some insights and contributions to all six areas.

Family and Consumer Sciences (FCS) Teacher Shortage

Enrollment in teacher-education programs has changed over the last two decades. According to the National Center for Education Statistics (NCES), in 1991 education degrees made up 10.1% of the total 1.09 million bachelors degrees conferred, a drop of 10% in total numbers since 1971. This drop was due to decreases in enrollment in education degree programs in the early 1970s and mid-1980s (NCES, 1994). The decrease in FCS has been more severe. There have been significant changes in enrollment in FCS programs in general and in FCS education in particular. The total undergraduate enrollment in all responding schools of FCS in the fall of 1969 was 83,312 (Gorman & Harper, 1970). According to the data complied by the Food and Agricultural Education Information System (FAEIS) data, an enrollment in FCS baccalaureate programs (for all responding schools) for fall 1995 was 56,434 (1996). This is a 32% decrease in total enrollment in FCS undergraduate programs.
A total of 4,582 bachelor's degrees in FCS teacher education were granted in 1966-67 (Gorman & Harper, 1970). The Southern Region had 2,388 of the FCS education degrees granted in 1971. This decreased to 1,445 in the Southern Region in 1979 (Mears, 1981). A total of 501 bachelor's degrees in FCS education were awarded in the United States in 1991-92 (FAEIS, 1993). This is only about 11% of the number of bachelor's degrees in FCS education awarded 25 years before and therefore is not a recent phenomena.

Total national enrollment in FCS education from all participating schools in the FAEIS study for fall 1995 was 1,452 persons. Of those, 449 were in institutions that were also in the current study (1996). See Appendix B for a list of responding institutions for the present study.

The decrease in enrollment in FCS programs in general affects the teacher supply, but of greater concern is the shift in majors. There are considerably more students enrolled in areas of specialization compared to those enrolled in FCS education programs. FCS education was the largest major or specialization in institutions which offered FCS programs until 1977 (Mears, 1981). Reprinted data from the 1971-1979 Harper Reports summarized by Mears (1981) showed considerably more graduates in FCS education in the 1970s than currently. The decrease began in the 1970s with a drop from 7,744 degrees granted in 1971 to 4,087 in 1979, a 47% decrease. Mears (1981) further

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1 The 14 states represented in the current study are the same as those in the Southern Region as described by Mears, except Puerto Rico was not included and Kentucky and New Mexico were added.
described the drop as "catastrophic" in projecting supply to meet the demand for the 1980s and beyond. Harper and Davis (1986) describe the move to increased specializations as a major contribution to keep FCS programs in post-secondary institutions functioning and viable.

Other professionals in FCS have expected the teacher shortage. In a more recent national study of perceptions of concerns for the profession of home economics educators, a critical need for recruiting secondary teachers was identified (Burge & Stewart, 1991). Other researchers also identified a future teacher shortage (Hall & Miller, 1989; Jackman & Rehm, 1994; Kellett & Beard, 1991). The concern is that no real efforts have been made to plan for the shortage and now it is a critical concern.

Decrease in enrollment in college programs of FCS can be partly contributed to increased opportunities for women in other educational programs and lack of males entering FCS programs (Burge & Stewart, 1991). Also, not only is there a decrease in the enrollment, there is also a decrease in the availability of teacher-education programs in FCS. The closing of teacher-education programs have contributed to the decreased supply of new graduates (Hall & Miller, 1989; Jackman & Rehm, 1994; Kellett & Beard, 1991). According to a national supply and demand study by Miller and Meszaros (1996), 27 undergraduate teacher preparation programs in FCS have recently closed, and five states no longer have any undergraduate teacher preparation programs (1996).²

² It should be noted that some of these states have not stopped preparing teachers in FCS but have adopted a 5th year, post-bachelor's, or graduate degree program for teacher preparation.
Seven southern states are among the 15 states cited by Miller and Meszaros (1996) as having the greatest demand based on supply, and these seven are included in the present study. According to Harper and Davis (1986), 57 undergraduate FCS programs were discontinued between the years 1968-69 and 1982-83.

Although some post-secondary programs have closed and enrollment in FCS education has decreased, enrollment in secondary school programs has not declined (McInnis, 1992; Mimbs, 1995). It remains strong and is even increasing in the last few years in some areas where there is a shift to block scheduling. Block scheduling allows more opportunities for students to take additional elective courses like FCS. Growth in secondary school enrollment in FCS programs was noted by the teacher shortage focus group of the Education and Technology Division of AAFCS (Stout, Fowler, Redick, & Couch, 1995).

Several supply and demand studies have been done in recent years both at the state and national level. All project shortages (Jackman & Rehm, 1994; McInnis, 1992; Mimbs, 1995; Morse, 1988). Miller and Meszaros (1996) noted that the demand for teachers and extension personnel in FCS to be about four times the supply and describe the shortage as a national crises for the profession.

Without an adequate supply to meet the demand for FCS teachers, closing of secondary programs would result. Even with strong enrollment in secondary school programs, administrators may not have any recourse but to close programs when certified teachers are not available. As projected five years ago by Burge and Stewart (1991), given a national teacher shortage in FCS, if recruitment measures are not strengthened loss
of programs may result. The Education and Technology Division of the American Association of Family and Consumer Sciences (AAFCS) held a focus group session at the 1995 annual meeting. The session's preliminary findings indicate that there is a shortage of FCS teachers and that teachers from other disciplines are teaching FCS subject matter for which they are not certified. One of the suggested causes which has contributed to the shortage was increase in those choosing professional preparation in other specialized areas within the field of FCS instead of teaching. Other causes were society's negative image of teaching as a profession and the impact of some FCS teachers who portray the difficulties of teaching FCS.

Examination of what motivates persons to choose teaching as a career and FCS as a field of study becomes necessary. This was one of the foci supported by the outcomes of a special research session of the American Vocational Association (AVA) Family and Consumer Sciences Division on the teacher shortage crisis and recruitment development strategies in November 1995. Outcomes included a call for the development of a national task force to address this issue, a systemic and comprehensive system for tracking and reporting teacher supply and demand, a philosophical and ideological base for the teacher shortage crises, and recruitment and promotional strategies. In addition, a research recommendation supported by session participants was the collection of current data that provides a descriptive profile of recent graduates and a target recruitment audience. One of the key recommendations by Miller and Meszaros (1996) also was the development of effective recruitment strategies.
Career Choice Motivations of Teachers

In a survey of 93 education majors, over 95% of the students strongly agreed with the following statements, "teaching will allow me to make a positive difference in the lives of children and youth," "teaching will give me an opportunity to use my creative abilities," "I like working with children," and "I like children and youth" (Hayes, 1990). Believing one will like what they plan to do is important. Sarason (1993) described one necessary criteria of choosing a teaching career as whether or not "becoming a teacher very much appeals to you" (p. 16). In addition, Sarason (1993) stated that persons who choose teaching want to take a role in influencing children's development.

In a study of Harvard Graduate School and Urban College students, Weiner (1993) examined motivational factors for choosing teaching as a career. Participating in socially useful work, working with young people, and opportunities for creativity were primary reasons given by students from both colleges for choosing a teaching career (Weiner, 1993). Students with an interest in human service aspects of a career choice indicated the "caring" of teaching as more important than the "academics" (Powell & Weaver, 1993). Teachers often indicate the need to "nurture" as a motivation for their choosing teaching as a career (Bullough, Knowles, & Crow, 1992; Kidder, 1989).

Serow (1994) examined the notion that teachers actually believe they have a "calling to teach". Bogue (1991) also defines teaching as a "calling" and describes teaching as "a journey of the heart" (p. 92). Over 30% of respondents in the current study indicated "I feel that teaching is my calling in life." Understanding one's own motivations is helpful in making a career choice (Sarason, 1993).
Although idealistic reasons are often described as motivations for teachers, teaching is more than pursuing ideals. Involvement in the larger educational process also becomes important (Sarason, 1993). Sarason wrote, “Teaching is not or should not be for those unwilling or unable to be active agents of educational-institutional changes. From the standpoint of the larger society, there is too much at stake to allow teachers to be passive participants in the dynamics and processes of change” (p. 19).

Altruism, helping others without concern for one’s self, has been identified as a motivating force for those seeking a teaching career (Daniel & Ferrel, 1991; Marso & Pigge, 1994; Serow, 1993). Altruism as a factor was the basis for a study by Serow (1993) of second-career teacher candidates or nontraditional students. After interviews the respondents were categorized as follows:

_Extenders_ are those whose interest in teaching can be seen as an extension or continuation of well-established beliefs and behaviors... _Subject-oriented_ respondents view teaching as a chance to work in a particular academic or vocational discipline (e.g., history, math, or electronics). _Practical_ interviewees cited security, scheduling, or simply the availability of work as the primary basis for their attraction to teaching. _Rectifiers see_ their earlier career decisions as fundamentally incompatible with their personal goals and needs. The delayed entry into teaching, then, represents an attempt to correct an error that they attribute to a desire to please others (parents or peers). (p. 202)

When combining the categories of extender and rectifier (just more than 1/2 of respondents), Serow (1993) described them as "natural teachers," persons who have had
an interest in teaching for a long time. Of the 26 respondents in the study, 24 indicated that "a sense of satisfaction from helping others" was one of their reasons for choosing teaching as a career.

An Iowa State University longitudinal study used the Career Path Model to examine differences between teacher education graduates who began teaching directly upon graduation and those who did not (Sweeney, 1990). Significant differences were found between teachers and non-teachers on several variables of the career path determinants which included preparation program factors, personal and background characteristics, and employment factors (Sweeney, 1990). As Sarason (1993) wrote,

Is there a match between the obligations, responsibilities, and problems inherent in that career and the individual’s personal style, needs, goals? That is a question many professionals failed to struggle with at the point of making a career decision, with the consequence that they have some regret about the choice they made.

That is as true for teachers as it is for lawyers, physicians, engineers, and business people. (p. 2)

Career choices are affected by many factors both within one's personal and work life. Therefore as more persons experience several careers over their lifetime, it follows that some teachers are not teaching as their first career.
Second Career Teachers: Implications for Recruitment and Marketing Strategies

In a California study of teacher candidates, Su (1994) found the majority of the teacher-education students to be nontraditionally-aged. Because there is an increase in numbers of nontraditional students/graduates of teacher-education programs, it is important to define what characteristics are more common to this group.

Nontraditional students/graduates in teacher-education are partly defined by their age and by their re-entry or late entry into certification programs. Hughes (1993) defined nontraditionally-aged students in teacher-education programs as those 24 years and older. They are also defined by their life experience. Serow (1993) described them as: “Typically ranging in age from the mid-20’s through the late-50’s, these more mature candidates are thought to bring to the teaching career an array of characteristics that are less readily apparent among traditional-age recruits” (p. 197). Su (1993) found that more than half of nontraditional students already had earned bachelor’s degrees. Job commitment, or intent to stay in teaching for longer periods of time, seemed to be a characteristic common to nontraditional students/graduates (Serow, 1993; Su, 1993).

Research has indicated a difference in personal characteristics and attitudes among nontraditionally-aged teacher-education students (Bendixen-Noe & Redick, 1995; Blois, 1993). Blois (1993) found developmental differences between traditional and nontraditional education students on attitudes and expectations. Although differences were small, they were all age-related. In a comparison of traditionally-aged and nontraditionally-aged beginning teachers, Bendixen-Noe and Redick (1995) found differences in both personal and professional characteristics. A focus on concern for self
was higher for traditionally-aged or younger teachers. In a qualitative study, Serow and Forrest (1994) found that motives for teaching were mostly intrinsic for those who were late-entry second career teacher-education students. Self-fulfillment and socio-economic concerns were given as reasons for moving from a previous career.

Some research has indicated that the increase in second career teachers is because of lack of satisfaction in previous careers (Daniel & Ferrel, 1991). This may be related to flux in the demand for teachers. There was more career motivation research done prior to the last teacher increase in the 1970s and not much again until more recently as shortages are being predicted (Daniel & Ferrel, 1991). Daniel and Ferrel provided a historical review of research on career motivations for teaching; factors most often examined included interest in teaching for altruistic reasons, gender of teachers, financial considerations, working with children, and interest in the subject. A review of career development theory provides further understanding of what motivates career choice decisions.

**Career Development Theory: The Life Span Perspective**

Super (1990), who is well known for his work on career development theory, described four contributing groups for career development theory: differential psychology, developmental psychology, occupational sociology, and personality theory. A person's human development over the life-span is affected by personal experiences. These include a person's goals, values, attitudes, and beliefs. In addition, life experiences can be affected by several factors, including multiple life stages. The social context within which persons make career decisions is a dynamic and interactive one. Career decisions are made within
different life stages (Vondracek, Lerner, & Schulenberg, 1986). Not only are there
developmental issues for the persons, there are also those of the social context. Therefore
following a multidisciplinary approach is useful when studying career development
(Vondracek, et al. 1986). Within the study of human development is a discussion on
systems theory which is a means to describe the factors of our environments as systems
which have cause, effect, and impact as they interrelate together.

Super (1990) used two models to illustrate career development theory. The first
was the Arches Model. It was a synthesis of several theories of career development. It
portrayed the biological-geographical foundations of human development. Over arching
all was personality which he described as a global construct. Within the columns that
support the arch are needs, intelligence, interest, traits, aptitudes, attitudes and self-
concepts. The cement that holds it all together is learning theory.

Super (1990) further described career development theory in his fourteen
propositions. He described it as a process through which persons develop and implement
self-concepts about occupations. It is a process through which persons examine their
aptitudes, abilities, and opportunities for careers. Through the process of career
development, one finds a fit between their personality, needs, values, and interests with the
set of characteristics needed for success in whatever career they are seeking. They need to
take into account the influence of social, environmental, and economic factors in making
their career decision. The last three of Super's (1990) propositions further illustrated this
process:
Work satisfactions and life satisfaction depend on the extent to which the individual finds adequate outlets for abilities, needs, values, interests, personality traits, and self-concepts. They depend on establishment in a type of work, a work situation, and a way of life in which one can play the kind of role that growth and exploratory experiences have led one to consider congenial and appropriate.

The degree of satisfaction people attain from work is proportional to the degree to which they have been able to implement self-concepts.

Work and occupation provide a focus for personality organization for most men and women, although for some persons this focus is peripheral, incidental, or even nonexistent. The other foci, such as leisure activities and homemaking may be central. (Social traditions, such as sex-role stereotyping and modeling, racial and ethnic biases, and the opportunity structure, as well as individual differences, are important determinants of preferences for such roles as worker, student, leisurite, homemaker, and citizen.) (pp. 207-208)

Super's (1990) second model, The Life Career Rainbow, was built upon his fourteen propositions of career development theory. Two categories of factors affecting career choice were depicted in the model. The first was Situational Determinants, which included both historical and socioeconomic elements within work, community and family roles. The second was Personal Determinants which included both psychological and biological components like interests, needs-values, achievement, and aptitudes.

Rapoport and Rapoport (1980) also examined the multiple factors affecting a person's career development. Their "triple helix model" took into account three sets of
experiences: occupational, family, and leisure. The focus on each set of experiences depends on life stages from childhood to old age. It allows for the flux and change in life from circumstances and disruptions. Career development then is a process that accounts for the person's need to balance multiple work, family, and community responsibilities.

Gladstein (1994) described six stages of career evolution in the adult years as "awareness, exploration, preparation, entry maintenance, and decline" (p. 14). If the stages are considered as a process within which a person's life-span in human development combines with career evolution, then opportunities exist for a more open approach to personal career identity. This is an example of personality theory. Gladstein (1994) further described personal identity development as a process which is impacted by life stages and important or "significant others" affecting that life stage. When considering personal identity as key to career development, conceptualization of a professional identity becomes important. Personal identity is directly related to professional identity. One's goals, values, and beliefs are all part of one's personal identity (Gentzler, 1993; Vincenti, 1993).

The Influence of Professional Identity and Reform Issues in FCS on the Teacher Shortage

Family and consumer sciences (FCS), formerly known as home economics, is a profession whose mission is to empower individuals, strengthen families, and enable communities to be successful in meeting the ever increasing challenges of life in today's world (American Home Economics Association (AHEA), 1994). It is a profession that has recently changed its name and sought a definition of professional identity to meet today's societal needs, yet the purpose underlying the profession's mission has not changed.
The following statement, although written in 1965, remains true of family and consumer sciences today: “Home economics, then, is an applied field of study, built upon many disciplines for the purpose of achieving and maintaining the welfare or well-being of homes and family life in an ever-changing society” (Lippeatt & Brown, 1965, p. 4).

In preparing for the future, at the Scottsdale Conference a unifying focus for the profession was developed in *A Conceptual Framework for the 21st Century.* “Family and consumer sciences uses an integrative approach to the relationships among individuals, families, and communities and the environments in which they function” (AHEA, 1994).

Vincenti (1993) described the increase in specializations within the field as an added difficulty to establishing a focused professional identity. Moran (1993) noted that there is a common body of knowledge that enables specialists to also have "the ability and perspective for integration and generalization on issues related to individual and family well-being" (p. 180).

In addition to strong stereotypical images of the FCS profession by the public, there is considerable lack of a positive consistent identity by the professionals themselves (Simerly, 1993). There is a need to recruit and retain FCS teachers who have a positive professional identity. It is sometimes through an introduction by teachers in secondary schools that persons first become interested in careers in FCS. Therefore continuing the profession through educating new professionals becomes important (Felstehausen & Couch, 1991; Kellett, 1991). There are, unfortunately, secondary teachers of FCS who emphasize a stereotypical image of the profession in their teaching (Burge & Stewart, 1991). Often the teacher and her/his classroom is the only picture students and parents
have of what FCS is all about (Erwin, 1995). Erwin (1995), who examined guidance
counselors' perceptions of secondary FCS programs, recommended that teachers do a
better job of marketing the value of what FCS teachers teach. A link was found between
the teacher and the perceptions of the program but also to the larger community (Erwin,
1995).

Through a recent study of teacher-education programs in FCS, Williamson,
Balogun, and Redick (1995) identified characteristics of continuing programs and
eliminated programs. Indicators of program quality were examined. Factors rated highly
for continuing programs included faculty commitment to teacher-education, enrollment,
demand for teachers in the field, and research productivity of faculty. The most important
influences in program elimination were financial factors, low enrollment, and university
administration. A recommendation of the researchers was to increase efforts by college
deans "to support quality programming and become active in marketing teacher education
programs both internally and externally" (p. 34).

In a national study of FCS teacher education, Kellett and Beard (1991) found an
increase in the move to post-baccalaureate programs, more rigorous requirements for
certification, lack of minority students, and an increase of nontraditional students seeking
certification. Influenced by political forces, Oregon State University, a member of the
Holmes Group, went to a fifth-year program for teacher education (Southers, 1991). The
University of Minnesota, also a Holmes Group member, redesigned its program into a
postbaccalaureate one for FCS teacher-education (Plihal, 1991). Reconceptualizing the
program was a key focus in the redesign process. Prior to admission, subject matter
competencies required focused on "the family...human development...family resource development and management...and contexts of the family" (pp. 28-29).

Felstehausen and Couch (1991) examined attitudes and perceptions of FCS state supervisors and state professional organization leaders on usefulness of content of secondary programs of the 1980s with implications for the 1990s. Suggestions for the 1990s included teacher concerns for serving at-risk youth and related challenges, shortage of teachers, and continuing support for programs.

Significant focus has been placed on reform in teacher-education programs in recent years. New paradigms are emerging, including most notably an increase in preparation time and education requirements before beginning a licensure program. The fifth year is usually combined as part of a master’s degree program. Additionally, there has been an increased use of testing as a criterion before licensure. This may discourage some from entering the teaching field (Murnane, Singer, Willet, Kemple, & Olsen, 1991).

Sarason (1993), although a supporter of fifth-year or graduate teacher-education programs, also recognized the economics and social disadvantage for many who want to go into teaching and cannot. He wrote, "Who teaches in our schools has always been determined by the factors of economics and gender" (p. 31). He recommended policy makers examine all implications of their decisions. In light of the variety within teacher-education programs it is important to consider what characterizes strong programs.

In making recommendations for strengthening teacher-education programs to meet the needs of our nation's schools, Goodlad (1990) suggested 19 postulates. In summary, he recommended that programs which educate educators must have a strong identity,
parity with other college programs, faculty members with their priorities focused on
teacher-education, a comprehensive understanding of the goals and needs of schools,
careful recruitment of the best and brightest who can think critically, positive socialization
of future teachers, commitment to equitable access, understanding of school
organizational change, more hands-on experiences for teachers, and help for the early
years of transition into teaching (Goodlad, 1990).

Hawley (1992) suggested eight issues or themes of reform impacting teacher-
education in the United States. In summary they are similar to others who have spoken of
increasing preparation experiences in the schools and strengthening requirements and
accountability. Hawley (1992) concluded that "states should develop ways that individuals
can be certified that would not require attendance in conventional preparation programs"
(p. 251). Following is a discussion of varied alternatives.

**Alternative Strategies to Address Teacher Shortage**

Several recruitment efforts and alternative teacher preparation models have been
developed in recent years to meet critical teacher shortage needs in other disciplines.
Different approaches have been used depending upon the seriousness of the teacher
shortage and related factors. Temporary shortages may allow the use of more flexible,
quick fixes. However, the teacher shortage in FCS is a chronic, systemic problem.
Identifying possible solutions, as one of the purposes of this study, will just be a start to
solving the problem. Long term planning for solving the teacher shortage in FCS may
involve a combination of new strategies, a testing of models, and perhaps also
reconceptualizing a new paradigm for FCS secondary programs.
Models that have been developed can be described as those offering one or more of the following options: (a) offering courses through distance education, (b) providing forgivable loans and scholarships, (c) allowing flexibility in requirements for licensure, especially credit for work experience, and related implications for policy makers (e.g. state departments of education), (d) fostering collaborative efforts with government and business groups, and (e) retraining current teachers for new disciplines and lateral movement.

Economic forces of supply and demand do not work in the area of public elementary and secondary education. Control of entry and control of funds is held by the states. State Boards of Education control criteria for licensing teachers and often wage scales. Some improvement is being made to address the control of states on training and retraining of teachers. Through the 1987-88 Teacher Demand and Shortage Survey for Public Schools, Ancarrow (1991) found that almost 200 public school districts nationally provided recruitment or retention pay incentives when faced with shortages. Additionally, over 500 school districts offered free retraining to current teachers for lateral moves into shortage fields.

The Teach for America program was developed to recruit promising college students to be teachers in inner cities and rural areas of shortages. According to the National Association of State Directors of Special Education (NASDSE) (1990), training and two-year placements were part of the incentives to those college students who had not previously considered a career in teaching.
A Louisiana project called ReSET was developed to recruit, retrain, and retain special education teachers in rural areas of the state. Distance learning and retraining were key components of the program (Carr, 1995). Ikei and Hoga (1995) described an alternative teacher training model in Hawaii to address a teacher shortage of special education teachers. Four key elements of the program included a unified and systematic approach, twenty all-day seminars, supervised field experiences with mentors, and centralized training delivered by Hawaiian interactive television (Ieki & Hoga, 1995). A program for teachers for the sensory impaired was developed by a consortium group of Utah universities (Robins, 1994). It also used video technology and interactive television to reach teacher-education students in rural areas. Required courses were provided through regional universities so re-location was not required. Summer student teaching was an option along with the more traditional model (Robins, 1994).

In collaborative efforts with government, San Nicolas and Avilla (1993) describe the situation in Guam. Although Guam spent two million dollars on recruitment efforts it did not solve the teacher shortage problem. Therefore the government in Guam, in cooperation with teacher-education groups in higher education, developed partnerships to provide two-year scholarships and alternative certification for would-be teachers with related work experience.

Several others have adopted alternative certification programs in times of shortages. In Alaska, a severe shortage of special education teachers prompted the development of a special committee to gather data for a comprehensive list of openings, locations, and available teachers. A recruitment effort was implemented which included a
promotional recruitment videotape (Schnorr, 1992). Oklahoma and Michigan, also facing shortage of special education teachers, investigated their situations and developed similar recruitment efforts and alternative certification (Davis, 1991; Parshall, 1990).

Through a national study of supply and demand for foreign language teachers, Draper (1988) found more than half of the states do not collect or keep data on supply and demand projections. Teacher shortages were reported at about 40% with 69% expecting shortages by 1993. Teachers for positions in small and rural schools were the hardest to fill.
Summary and Conclusions

A teacher shortage in FCS exists. Therefore it is vital to the continuation of the
FCS profession that members begin concerted recruitment efforts to attract prospective
teachers into the field. Maintaining and strengthening current FCS teacher education
programs and even bringing back some programs that have closed may be needed to meet
teacher shortage needs. Increasing enrollment in FCS majors in post secondary
institutions and specifically in FCS education will be necessary.

Career choice motivations and career development theory provide insights for
identifying target recruitment audiences. Developing an awareness of the impact of life
stage development and other determinants on career choice decisions may contribute to
better marketing and recruitment efforts. Special attention to the career motivations of
second career teachers may be especially helpful in facilitating appropriate marketing
strategies. Adaptations to traditional FCS teacher education programs may be needed to
facilitate easier access for those seeking teaching as a second career. Traditional teacher-
education programs may not meet the current and future needs of the profession.

Given the crises level of need for FCS teachers, it is important to identify possible
alternative solutions to the problem. Cooperative efforts between state certification
officials and teacher education institutions, distance learning and other alternative delivery
systems, retraining teachers certified in other areas for lateral movement, increased
scholarships and other financial incentives may offer solutions to the teacher shortage.
Reconceptualizing a professional identity for FCS, particularly as it pertains to increasing
positive marketing and recruitment efforts by current FCS teachers is important.
Cooperative efforts among FCS teacher educators and administrators to develop and model alternative preparation methods for the short term shortage needs may be conducive to long term planning to meet teacher need in FCS education. It is no longer enough to just talk about the shortage, it is time to take action. Building and strengthening our FCS teaching force is crucial to maintain and strengthen the profession as it positions itself for the 21st century.
References


Appendix B

Letters to Teacher Educators and

List of Reporting Institutions
MEMORANDUM

TO: Family and Consumer Sciences Teacher Educators
FROM: Cheryi A. Mimbs, Doctoral Student, Virginia Tech
RE: Request for Information on Recent Graduates
DATE: November 15, 1995

I am writing to request assistance in establishing a sample for my dissertation research. Although I am a new teacher educator at The University of Tennessee, Knoxville, I am also still completing my doctoral degree from Virginia Tech. Daisy Stewart is Co-Chair of my committee and is supportive of my efforts to contact you for assistance.

Several national and state supply and demand studies, such as one I completed for the state of Virginia, indicate a serious teacher shortage in family and consumer sciences (FACS). It is vital to the continuation of our profession that we begin concerted recruitment efforts to address this shortage. To facilitate our recruitment efforts as teacher educators, it is important to understand how our recent graduates made their career choices. This will give us a clearer picture of who our target audiences are and how best to reach those audiences.

The purpose of this study is to identify the factors which affected the career choices and career development decisions of recent college graduates from FACS teacher education programs in the fourteen southeastern and southwestern states that are in AVA Region 2 and Region 4. Additionally, this study will examine the demographic characteristics of the graduates.

I am asking for your assistance by providing the names and addresses of graduates of your FACS teacher education certification or licensure program from academic years 1992-93, 1993-94, and 1994-95, including those who graduated mid year. I do not need the
addresses of current students in the program of December 1995 graduates. Please include those who received initial teacher certification or licensure through a post-baccalaureate or master's degree program.

To facilitate my efforts to contact these persons, a home or permanent address and telephone number would be most helpful. Additionally, if you have their work address that may be an easy way for me to get in touch with them. If I should contact someone else at your institution to get this information, please identify that person for me or pass this letter along to them.

Complete confidentiality of subjects' responses will be provided. I will ask the respondents to indicate if they would like to participate in later longitudinal qualitative studies. The surveys will be numbered for the purpose of follow up of non-respondents. An expert panel will examine the survey instrument and it will be pilot tested in another geographical location.

Enclosed is a self-addressed stamped envelope for your convenience. I can also be reached by telephone at (423) 974-7014, FAX (423) 974-2617, or e-mail at cmimbs@utkvx.utk.edu.

I look forward to perhaps meeting you at the AVA pre-conference session in Denver which will be addressing our teacher shortage. This session is being sponsored by the Family and Consumer Sciences Education Division Research Committee. Thank you for your assistance.
MEMORANDUM

TO: Teacher Educators of Family and Consumer Sciences

FROM: Cheryl A. Mimbs, Assistant Professor, College of Human Ecology, University of Tennessee, and Doctoral Student, Virginia Tech

RE: Second Request for Information on Recent Graduates

DATE: January 15, 1996

Earlier this fall I wrote you regarding seeking your assistance in establishing a sample for my dissertation research. I am completing my degree from Virginia Tech. As you probably know we are facing a serious teacher shortage in family and consumer sciences. This was recently confirmed at the pre-conference at AVA in Denver.

To facilitate our recruitment efforts as teacher educators it is important to understand how our recent graduates made their career choice. It will give us a clearer picture of who our target audience is and how best to reach that audience. It is vital to the continuation of our profession that we begin concerted recruitment effort to address the teacher shortage.

The purpose of my study is to identify the demographic characteristics of recent college graduates from family and consumer sciences (FACS) teacher education programs in the fourteen southeastern and southwestern states that are in AVA regions 2 and 4. Additionally, this study will examine the factors which affected their career choice and career development decisions.

If you have not already responded, I hope you will take a few moments now to assist me by providing the names and addresses of recent graduates of your family and consumer sciences teacher education certification or licensure program. The recent graduates would be from academic years 1992-93, 1993-94, and 1994-95, including those who graduated mid year. I do not need the addresses of current students in the program or December
1995 graduates. Alumni offices are often very helpful in finding graduates' current addresses.

To facilitate my efforts to contact these persons, a home or permanent address and telephone number would be most helpful. Additionally, if you have their work address, that may be an easy way for me to get in touch with them. If I should contact someone else at your institution to get this information, please identify that person for me or pass this letter along to them.

Complete confidentiality of subjects' responses will be provided. The surveys will be numbered for the purpose of follow up of non-respondents. An expert panel will examine the survey instrument and it will be pilot tested in another geographic location.

Enclosed is a self-addressed stamped envelope for your convenience. I can also be reached by telephone at (423) 974-7014, FAX (423) 974-2617, or e-mail at cmimbs@utkvs.utk.edu

Thank you for your assistance.
Responding Institutions

AVA Region 2
Participating Institutions (n=22)

Alabama A&M University
Appalachian State University
Auburn University
Bridgewater College
Campbell University
Carson-Newman College
East Tennessee State University
Florida State University
Jacksonville State University
Middle Tennessee State University
Morehead State University
South Carolina State University
Tennessee Technological University
University of Tennessee, Martin
University of Kentucky
University of Tennessee, Knoxville
University of North Alabama
University of Georgia
University of Alabama
Virginia Tech
Western Carolina University
Western Kentucky University

Closed Programs (n=2)

Bennett College
University of NC, Greensboro

AVA Region 4
Participating Institutions (n=23)

Delta State University
East Central Oklahoma State University
Harding State University
Henderson State University
Louisiana Tech University
McNeese State University
Mississippi University for Women
New Mexico State University
Nicholls State University
Northeast Louisiana University
Oklahoma State University
Quachita Baptist University
Southeastern Louisiana University
Southwest Texas State University
Southwestern Oklahoma State University
Stephen F. Austin State University
Texas Woman’s University
Texas Tech University
Texas Southern University
Texas A&I University
University of Southern Mississippi
University of Sciences & Arts of OK
University of Arkansas

Closed Programs (n=5)

Alcorn State University
Baylor University
Northwestern Oklahoma State University
The University of Mississippi
University of Houston

Note. The original mailing was sent to a total of 92 institutions. No responses were received from the other 40 institutions.
Appendix C

Survey Instrument
This survey asks questions regarding your career choice decisions as well as personal, employment, and education demographics. Please answer as completely as you can. Thank you.

1. Did you teach as your first full-time career?
   __ a. Yes  __ b. No
   If no, what was your first full-time career?________________________________
   How long were you in that career? ______ years

2. Did you teach after being a full-time homemaker and/or parent?
   __ a. Yes  __ b. No

3. Please choose three of the following factors which influenced your decision to seek teacher certification for your career preparation. Rank them by their influence on your career decision by placing the numbers 1 through 3 in the corresponding blank with 1 being the most influential.
   __ a. Family members were teachers.
   __ b. Teachers can bring about social change.
   __ c. I like helping people.
   __ d. Teaching is a job to fall back on.
   __ e. The schedule is attractive.
   __ f. I like working with young people.
   __ g. Teaching is a relatively secure job.
   __ h. My fellowship/scholarship required it.
   __ i. The example of my own teachers inspired me.
   __ j. I needed a major and this was available.
   __ k. I felt that teaching is my calling in life.
   __ l. Other (list)____________________

4. When you decided to be a teacher, was FCS your first choice of a teaching field?
   __ a. Yes  __ b. No
   If no, what teaching field was your first choice?

5. When did you initially decide to pursue teacher certification in FCS?
   (Check one.)
   __ a. when I was in middle school
   __ b. when I was in high school
   __ c. when I was a college freshman or sophmore
   __ d. when I was a college junior or senior
   __ e. after I completed a bachelor's degree
   __ f. after I worked in another occupation (list)____________________
   __ g. other (list)____________________

6. Please choose three of the following factors which influenced your decision to choose family and consumer sciences (FCS) as your teaching subject area. Rank them by their influence on your career decision by placing the numbers 1 through 3 in the corresponding blank with 1 being the most influential.
   __ a. A family member is/was an FCS teacher.
   __ b. Other members of my family influenced me.
   __ c. My friends influenced me.
   __ d. My secondary FCS teacher(s) influenced me.
   __ e. My high school counselor influenced me.
   __ f. My college instructors influenced me.
   __ g. I am interested in FCS subject matter.
   __ h. I was already in an FCS major and decided to be a teacher.
   __ i. My experience in FMS/HERO influenced me.
   __ j. Participation in FCS professional organization(s) influenced me.
   __ k. I want to help families.
   __ l. I received scholarships or grants specifically for FCS education
   __ m. Other (list)____________________

(Please turn the page over to continue.)
7. Please choose three of the personal values listed below which influenced your decision to seek teacher certification. Rank them by their influence on your career decision by placing the numbers 1 through 3 in the corresponding blank with 1 being the most influential.

a. creativity
b. professional satisfaction
c. religion, spiritual fulfillment
d. social justice, equality
e. friendship
f. working for peace, reconciliation
g. family
h. helping other people
i. pleasure, new experiences
j. recognition from others
k. material comfort, wealth
l. other (list)

8. Please indicate the percent (%) of time for each of the following that apply in your current employment situation.

   a. Not teaching (Skip to Item 11.)
   b. Teaching FCS
   c. Teaching other subject(s) (list)
   d. Other (explain)

100% total

9. Of the time you teach FCS, please indicate the percent (%) of time for each of the following that apply in your current teaching situation.

   a. I teach occupational FCS.
   b. I teach consumer and homemaking FCS.
   c. Other (specify)

100% total

10. Please indicate the percent (%) of time for each of the following that apply in your primary teaching situation.

   a. I teach elementary school.
   b. I teach middle school or junior high.
   c. I teach high school.
   d. Other (specify)

100% total

11. If you are not teaching at the present time, what is the reason? (Check all that apply.)

   a. I am attending graduate school.
   b. I am a full-time homemaker and/or parent.
   c. I have not been able to secure a teaching job in the geographical area in which I want to live.
   d. The pay is too low in the teaching profession.
   e. I am self-employed. (explain)
   f. I am already employed in another occupation. (explain)
   g. Other (explain)

12. If you are not teaching at the present time, do you plan to teach in the future?

   a. yes   b. no

13. How satisfied are you with your present career choice?

   a. very satisfied
   b. somewhat satisfied
   c. somewhat dissatisfied
   d. very dissatisfied

14. What is your gender?

   a. female   b. male

15. Please indicate your age.

16. Please indicate your marital status.

   a. single   b. married   c. widowed   d. separated or divorced

(Please turn to the next page to continue.)
17. Do you have children living at home?

   a. yes   b. no

   If yes, how many children in each age group?

   a. under 6 years   b. 6-12 years   c. 13-18 years   d. over 18 years

18. Are you?

   a. African American   b. Asian/Pacific Islander
   c. Caucasian   d. Hispanic
   e. Native American/Alaskan   f. Other (describe)

19. In what geographical classification would you describe yourself as living currently? (Check one.)

   a. rural   b. town with under 10,000 people
   c. town or city with 10,000-50,000 people   d. suburb of city with over 50,000 people
   e. central city of over 50,000 people

20. In what geographical classification would you describe yourself as working currently? (Check one.)

   a. rural   b. town with under 10,000 people
   c. town or city with 10,000-50,000 people   d. suburb of city with over 50,000 people
   e. central city of over 50,000 people

21. In what state do you currently reside? (Please use 2 letter abbreviation.)

22. What year did you receive initial licensure to teach FCS?

23. What year did you complete your bachelor's degree?

24. Please indicate the type of program through which you completed teacher licensure for FCS. (Select one.)

   a. bachelor's   b. post-bachelor's certification
   c. 5th year program with credits towards master's degree
   d. master's degree   e. other (explain)

25. Please indicate how your education was financed. (Check all that apply.)

   a. scholarships   b. grants
   c. student loans   d. parental support
   e. spouse support   f. savings
   g. personal earnings   h. other (explain)

26. List the professional organizations to which you belong. Circle those in which you are actively involved.

Thank you for your participation in this study. Please return it in the postage paid envelope. If you wish to be considered for participation in the confidential follow-up interviews, please complete the information on the back of the cover letter and return it with the survey. You may use the space below for any questions or comments you would like to add.

Comments:
Appendix D

Instructions to Subjects
Memorandum

To: Recent Graduates of Family and Consumer Sciences Education Programs

From: Cheryl A. Mimbis, Assistant Professor, University of Tennessee, Knoxville and Graduate Student, Virginia Tech, Blacksburg, VA

Re: Survey Participation

Date: May 2, 1996

You have been identified as a recent graduate who has completed a licensure program in family and consumer sciences (FCS) education (formerly home economics). Your name and address has been supplied by the teacher educator at the institution where you received your licensure to teach FCS.

As you may know, FCS is experiencing a teacher shortage. The purpose of this research is to develop a descriptive profile of recent graduates. This profile will facilitate development of recruitment strategies to bring new students into teacher education programs in FCS.

In addition to the survey enclosed, there will be selected follow-up telephone interviews. These interviews will discuss in more detail the questions asked on the survey.

I assure you that if you decide to participate, your response will remain confidential. The survey is numbered to allow for follow-up of nonrespondents. You do not need to put your name on the survey or any other information that will identify you as a participant.

If you wish to be considered for the follow-up interviews please indicate your consent and provide the appropriate information on the back of this letter. This page will be stored separately from your survey and the information will be completely confidential. You will be notified by telephone if you have been selected.

Your participation is entirely voluntary. Returning the completed survey will constitute your informed consent to participate in this project. However, you do have the right not to complete the survey. A decision not to participate will not affect you in any way.

If you have any questions about this research project or would like to discuss this experience, please contact me at 423-974-7014 (Department of Human Resource Development, University of Tennessee) or Dr. Dany Stewart at 540-231-4180. If you would like to write me, my address is University of Tennessee, JH 6, 12/3 W. Cumberland Ave, Knoxville, TN 37996-2755 and my e-mail address is cmimbis@uiw.vt.edu. Thank you for your time and cooperation. As a recent graduate and new professional in FCS, your input for this study will be very helpful. Please return the survey by May 20, 1996.
Dear Colleague, May 17, 1996

As a graduate of a family and consumer sciences (FCS), (formerly called home economics), teacher certification program, you were recently sent a survey. If you have not completed the survey, please take a few moments and do so now, and mail in the postage-paid envelope. Your input is very valuable to this study. Thank you for your participation.

Sincerely,
Cheryl A. Mimbs
Assistant Professor, University of Tennessee
Graduate Student, Virginia Tech

Dear Colleague, June 5, 1996

As a graduate of a family and consumer sciences (FCS), (formerly called home economics), teacher certification program, you were recently sent a survey. Another survey is enclosed for you. If you have not completed the survey, please take a few moments and do so now, and mail in the postage-paid envelope. Your input is very valuable to this study. Thank you for your participation.

Sincerely,
Cheryl A. Mimbs
Assistant Professor, University of Tennessee
Graduate Student, Virginia Tech
Memorandum

To: Recent Graduates of Family and Consumer Sciences Education Programs

From: Cheryl A. Mimsb, Assistant Professor, University of Tennessee, Knoxville
       and Graduate Student, Virginia Tech, Blacksburg, VA

Re: Survey Participation

Date: August 20, 1996

You have sent this survey in May and June of this year. You have not yet heard from you. Please take a few minutes and complete the survey and return in the postage-paid envelope. Your assistance is essential to the success of this research study. Even if you choose not to participate, sending back a blank survey will help in accounting for non-response rate. Thank you.

You have been identified as a recent graduate who has completed a licensure program in family and consumer sciences (FCS) education (formerly home economics). Your name and address has been supplied by the teacher educator at the institution where you received your licensure to teach FCS.

As you may know, FCS is experiencing a teacher shortage. The purpose of this research is to develop a descriptive profile of recent graduates. This profile will facilitate development of recruitment strategies to bring new students into teacher education programs in FCS.

I assure you that if you decide to participate, your response will remain confidential. The survey is numbered to allow for follow-up of nonrespondents. You do not need to put your name on the survey or any other information that will identify you as a participant.

Your participation is entirely voluntary. Returning the completed survey will constitute your informed consent to participate in this project. However, you do have the right not to complete the survey. A decision not to participate will not affect you in any way.

If you have any questions about this research project or would like to discuss this experience, please contact me at 423-974-7014 (Department of Human Resource Development, University of Tennessee) or Dr. Daisy Stewart at 540-231-8160. If you would like to write me, my address is University of Tennessee, JHB 6, 1215 W. Cumberland Ave, Knoxville, TN 37996-2755 and my e-mail address is cmimsb@vtunix.vt.edu. Thank you for your time and cooperation. As a recent graduate and new professional in FCS, your input for this study will be very helpful. Please return the survey by September 10, 1996.
Appendix E

Field Test
Field Test

The survey instrument and cover letter was mailed in April 1996 to twelve graduates from a FCS licensure program at a large land-grant university in the southeast to determine the clarity of the survey instrument and to test the procedures for data collection. These graduates names were obtained from a teacher educator and were graduates from the academic years 1989 through 1991, the three years prior to those used for this study. Surveys were numbered for follow-up of nonrespondents. Graduates were asked to complete the survey, indicate willingness to participate in trial test follow up interviews, and also provide editorial comments on the readability and ease of use of the instrument. Eight graduates returned a field test survey.

The following adaptations were made to the final survey based on the outcomes of the field test. The format of the instrument was changed to facilitate readability and to shorten the look of the survey. Field test participants provided written comments so plenty of room was allowed for this on final survey. Order of some of the items was changed and wording of instructions was clarified. One item regarding the effectiveness of teacher preparation program was removed.
MEMORANDUM

TO: Recent Graduates of Family and Consumer Sciences Education Programs

FROM: Cheryl A. Mimbs, Assistant Professor, University of Tennessee, Knoxville and Graduate Student, Virginia Tech, Blacksburg, VA

RE: Survey Participation

DATE: April 5, 1996

You have been identified as a recent graduate who has completed a licensure program in family and consumer sciences (FCS) education (formerly home economics). Your name and address has been supplied by the teacher educator at the institution where you received your licensure to teach FCS.

As you may know, FCS is experiencing a teacher shortage. The purpose of this research is to develop a descriptive profile of recent graduates. This profile will facilitate development of recruitment strategies to bring new students into teacher education programs in FCS.

In addition to the survey enclosed, there will be selected follow-up telephone interviews. These interviews will discuss in more detail the questions asked on the survey.

I assure you that if you decide to participate your response will remain confidential. The survey is numbered to allow for follow-up of nonrespondents. You do not need to put your name or any other information that will identify you as a participant on the survey.

If you wish to be considered for the follow-up interviews, please indicate your consent and provide the appropriate information on the yellow page enclosed. This page will be stored separately from your survey and the information will be completely confidential. You will be notified by telephone if you have been selected.
Your participation is entirely voluntary. Returning the completed survey will constitute your informed consent to participate in this project. However, you do have the right not to complete the survey. A decision not to participate will not affect you in any way.

If you have any questions about this research project or would like to discuss this experience, please contact me at 423-974-7014 (Department of Human Resource Development, University of Tennessee) or Dr. Daisy Stewart at 540-231-8180. If you would like to write me, my address is University of Tennessee, JHB 6, 1215 W. Cumberland Avenue, Knoxville, TN 37996-2755, and my e-mail address is cmimsb@utkvc.utk.edu. Thank you for your time and cooperation. As a recent graduate and new professional in FCS, your input for this study will be very helpful.

Special Note: This mailing, of which you are a part, is the field test for a larger mailing. I am asking for you to complete this survey as though you were part of the larger study, but am also asking that you provide your critique and evaluation of the instrument and cover letter. Your participation is also voluntary and your response will be kept confidential. Your assistance in this way will be very helpful in determining the best way to proceed with this study.
Willingness to be Considered to Participate in Follow-up Interviews

The interviews that I will be conducting will discuss in more detail the questions asked on the survey.

I assure you that if you decide to participate, your responses will remain confidential. If you wish to be considered for the follow-up interviews, please provide the appropriate information below. Please indicate both day and evening telephone numbers where you can be reached during the months of April through July.

This page will be stored separately from your survey and the information will be completely confidential. You will be notified by telephone if you have been selected in order to confirm an appropriate time for the interview.

The interviews will last about 30 minutes to one hour. There will be no expense to you. They will be audio-taped and transcribed for data analysis. You will be giving your consent to be audio-taped by signing this form. You will be also asked to confirm on tape your willingness to be audio-taped at the beginning of the interview, but your identity will only be by code.

Your agreement will be your full and informed consent to participate in this project. Your responses will be kept completely confidential. You will not be identified in any written materials and your name or any identifying information will not be transcribed. I will be the only one conducting the interview.

Thank you again for your willingness to participate. Please complete the information below and return it in the postage paid envelope enclosed.

Name: __________________________________________
Permanent address:________________________________

Telephone number-please include area code. day:(__)
                                                evening:(__)

By signing below I provide my informed consent to be considered for selection in the follow-up telephone interviews. I understand my participation is voluntary and the information will be confidential.

Signed:_________________________________________ Date:____________
Survey of Recent Graduates of Family and Consumer Sciences Education Programs

1. Please choose five of the following factors which influenced your decision to choose teaching as a career. Rank them by their influence on your career decision by placing the numbers 1 through 5 in the corresponding blank with 1 being the most influential.

___ a. Family members were teachers.
___ b. Teachers can bring about social change.
___ c. I like helping people.
___ d. Teaching is a job to fall back on.
___ e. The schedule is attractive.
___ f. I like working with young people.
___ g. Teaching is a relatively secure job.
___ h. My fellowship/scholarship required it.
___ i. The example of my own teachers inspired me.
___ j. I needed a major and this was available.
___ k. I feel that teaching is my calling in life.
___ l. Other (please list) ____________________________

2. Did you teach as your first full-time career?

___ a. Yes ___ b. No

If no, what was your first full-time career? ____________________________

3. Did you teach after doing full-time home-based work as a homemaker and/or parent?

___ a. Yes ___ b. No

4. Please choose five of the following factors which influenced your decision to choose family and consumer sciences (FCS) as your teaching subject area. Rank them by their influence on your career decision by placing the numbers 1 through 5 in the corresponding blank with 1 being the most influential.

___ a. A family member is/was an FCS teacher.
___ b. Members of my family influenced me.
___ c. My friends influenced me.
___ d. My secondary FCS teacher(s) influenced me.
___ e. My high school counselor influenced me.
___ f. My college instructors influenced me.
___ g. I am interested in FCS subject matter.
___ h. I was already in an FCS major and decided to be a teacher.
___ i. My experience in FHA/HERO influenced me.
___ j. Participation in FCS professional organization(s) influenced me.
___ k. I want to help families.
5. Choose five of the personal values listed below which influenced your decision to choose teaching as a career. Rank them by their influence on your career decision by placing the numbers 1 through 5 in the corresponding blank with 1 being the most influential.

___ a. creativity
___ b. professional satisfaction
___ c. religion, spiritual; fulfillment
___ d. social justice, equality
___ e. friendship
___ f. working for peace, reconciliation
___ g. family
___ h. helping other people
___ i. pleasure, new experiences
___ j. recognition from others
___ k. material comfort, wealth
___ l. other (please list) _______________

6. When you decided to be a teacher, was FCS your first choice of a field of study?

___ a. Yes ___ b. No

If no, what field of study was your first choice?

_____________________________

7. When did you initially decide to pursue teacher certification in FCS?
   (Check only one.)

___ a. when I was in middle school
___ b. when I was in high school
___ c. when I was a college freshman or sophomore
___ d. when I was a college junior or senior
___ e. after I completed a bachelor's degree
___ f. after I worked in another occupation (please list) _______________
___ g. other (please list) ________________________________

Employment Data:

8. Please indicate the percent (%) of time for each of the following that apply in your current employment situation.

___ a. Not teaching (Please skip to item 11.)
___% b. teaching FCS
___% c. teaching other subject(s) (please list) ___________________________
___% d. other, explain______________________________________________

100% total

(Turn to the next page.)
9. Of the time you teach FCS, please indicate the percent (%) of time for each of the following that apply in your current teaching situation.

___%  a. I teach occupational FCS.
___%  b. I teach consumer and homemaking FCS.
___%  c. other, specify _____________________________
100% total

10. Please indicate the percent (%) of time for each of the following that apply in your primary teaching situation.

___%  a. I teach elementary school.
___%  b. I teach middle school or junior high.
___%  c. I teach high school.
___%  d. other, specify _____________________________
100% total
Please skip to item 14.

11. If you are not teaching at the present time, what is the reason? (Check all that apply.)

___ a. I am attending graduate school.
___ b. I am a full-time homemaker and/or parent.
___ c. I have not been able to secure a teaching job in the geographical area in which I want to live.
___ d. The pay is too low in the teaching profession.
___ e. I am self-employed. (Please explain.) _____________________________
___ f. I am already employed in another occupation. (Please explain.) _____________________________
___ g. other (Please explain.) _____________________________

12. If you are not teaching at the present time, do you plan to teach in the future?

___ a. yes    ___ b. no

13. How satisfied are you with your present career choice?

___ a. very satisfied    ___ c. somewhat dissatisfied
___ b. somewhat satisfied ___ d. very dissatisfied

Personal Demographic Data:

14. What is your gender?    ___ a. female    ___ b. male

15. Please indicate your age. ___

16. Please indicate your marital status.

___ a. single    ___ c. widowed
___ b. married    ___ d. separated or divorced (over)
17. Do you have children living at home?

   ___ a. yes             ___ b. no

If yes, how many children in each age group?

   ___ a. under 6 years   ___ c. 13-18 years
   ___ b. 6-12 years      ___ d. over 18 years

18. Are you?

   ___ a. African American ___ d. Hispanic
   ___ b. Asian/Pacific Islander ___ e. Native American/Alaskan
   ___ c. Caucasian        ___ f. Other

19. In what state do you currently reside? (Please use 2 letter abbreviation.) ___

20. In what geographical classification would you describe yourself as living currently? (Check one.)

   ___ a. rural
   ___ b. town with under 10,000 people
   ___ c. town or city with 10,000-50,000 people
   ___ d. suburb of city with over 50,000 people
   ___ e. central city of over 50,000 people

21. In what geographical classification would you describe yourself as working currently? (Check one.)

   ___ a. rural
   ___ b. town with under 10,000 people
   ___ c. town or city with 10,000-50,000 people
   ___ d. suburb of city with over 50,000 people
   ___ e. central city of over 50,000 people

Education:

22. Indicate the type of program through which you completed teacher certification. (Select one.)

   ___ a. bachelor's
   ___ b. post-bachelor's certification
   ___ c. 5th year program with credits towards master's
   ___ d. master's degree
   ___ e. other (Please explain.) ____________________________

   (Turn to the next page.)
23. Please circle the number which best fits your perceptions of the effectiveness of your teacher preparation program to prepare you for the following teacher roles and responsibilities. 4 = very effective, 3 = effective, 2 = slightly effective, 1 = not effective

<table>
<thead>
<tr>
<th>Role Description</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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</thead>
<tbody>
<tr>
<td>a. instructional methods and curriculum</td>
<td></td>
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<td></td>
<td>4</td>
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<tr>
<td>b. classroom behavior management</td>
<td></td>
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<td>4</td>
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<tr>
<td>c. students with special needs</td>
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<tr>
<td>d. technology in the classroom</td>
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<tr>
<td>e. impact of societal issues on teaching</td>
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<tr>
<td>f. teachers' role in the school as an organization</td>
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<td>g. teachers' role with school administration</td>
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<td>h. content area knowledge</td>
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<tr>
<td>i. student teaching/internship</td>
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<td>4</td>
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<td>j. professional organization involvement</td>
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<td>k. interaction with parents</td>
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<td>l. interaction with community</td>
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<td>4</td>
</tr>
</tbody>
</table>

24. Please indicate how your education was financed. (Check all that apply.)

- a. scholarships
- b. grants
- c. student loans
- d. parental support
- e. spousal support
- f. savings
- g. personal earnings
- h. other

25. Indicate your involvement in professional organizations by listing those to which you belong. Circle those in which you are actively involved through serving on committees or boards or as an officer or presenter.

Please provide any suggestions you have for changes in this survey instrument, the cover letter or the additional yellow page, right on the pages or in comments below. Your feedback will be very useful in preparation for sending out the survey to the large group. Thank you for your participation in this field test survey. Please return it in the postage paid envelope. If you wish to be considered for participation in the confidential field test of the follow-up interviews, please complete the enclosed yellow page and also return it in the envelope provided.

Comments:
VITA

Cheryl A. Mimbs
1429 Audena Lane
Knoxville, TN 37919

Personal:

Born Cheryl Ann Lango on December 28, 1959 in Springville, NY. Received a Bachelor of Science Degree in Home Economics Education from Oregon State University, Corvallis, OR, December 1990. Received Master of Science Degree in Vocational and Technical Education from Virginia Polytechnic Institute and State University, Blacksburg, VA, May 1994.

Professional Experience:

High school home economics teacher for Schenectady City Schools, Schenectady, NY 09/91-06-92. Middle school home economics teacher for Montgomery County Schools, Blacksburg, VA, 08/92-06/93. Graduate teaching assistant for the Vocational and Education Department, College of Education, Virginia Polytechnic Institute and State University, Blacksburg, VA, 08/93-05/95. Assistant Professor for the Department of Human Resource Development, College of Human Ecology, University of Tennessee, Knoxville, TN, 08/95 to present.