

Family and Consumer Sciences Programs in Secondary Schools: Results of a National Survey

A national survey of secondary family and consumer sciences (FCS) education programs focusing on the 2002–2003 academic year showed that 5,517,976 students were enrolled in FCS classes taught by 37,500 teachers. Three states responding to the survey reported having a state requirement for a specific FCS course, and many states reported that local schools and districts had such requirements. The survey also revealed that the field of FCS education is continuing to experience a serious shortage of qualified teachers. The label “family and consumer sciences” is an ongoing challenge for those wishing to collect data on program characteristics and other issues because it is still not used consistently by organizations and agencies.

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A significant concern for the field of family and consumer sciences (FCS) education for many years has been a lack of reliable and current data on program characteristics and effectiveness that can be used for communicating with policymakers. The need for such information is particularly evident during time periods when federal education policies are being considered for reauthorization. President Bush’s recent calls for elimination of Carl D. Perkins Vocational and Technical Education Act funding (Association for Career and Technical Education, 2005), an important source of support for family and consumer education programming, is a vivid reminder of how critical such data can be in policy-making efforts. Although state and local dollars represent the primary funding streams for FCS programs, Perkins funding continues to be seen in many states as the symbolic stamp of approval for FCS programs; moreover, the Perkins act provides funds for state administration. Strong state administration may include maintaining relevant state standards, curriculum development and distribution, professional development opportunities for FCS teachers, and data collection.

Little research has been published on the status of FCS at the national level. The most comprehensive historical data were gathered from a U.S. Department of Health, Education, and Welfare study conducted in 1959 that listed numbers of FCS students by state and region as well as according to individual courses (Coon, 1962). A study involving the use of a national sampling strategy was published in 1980, but that investigation did not provide individual state-level data (Hughes, 1980). All other research published to date has been conducted in individual states.

To address the need for descriptive information on secondary-level family and consumer education programs, the National Coalition for Family and Consumer Sciences Education undertook a

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national survey in 2004. This coalition was established in 1977 to help coordinate professional organization efforts addressing issues related to FCS education, particularly the development of state and federal policy. The membership of the coalition consists of two representatives appointed by each of the three professional organizations associated with FCS education: the American Association of Family & Consumer Sciences (AAFCS), the Association for Career and Technical Education (ACTE), and the Family and Consumer Sciences Education Association (FCSEA). Members are appointed for staggered, 3-year terms. A liaison from the Family, Career and Community Leaders of America (FCCLA) student organization and an adviser/public policy historian also meet regularly with the group.

The coalition's survey, which focused on the 2002–2003 school year, was designed to ascertain (a) the number of students enrolled in FCS education in Grades 9–12 according to gender, (b) the number of FCS education teachers according to gender, (c) estimates of the balance of teacher supply and demand, (d) the number of states that require FCS courses at the secondary level, and (e) titles of popular courses.

METHODOLOGY

In February 2004, a survey was sent via e-mail to all of the members of the National Association of State Supervisors of Family and Consumer Sciences Education, an affiliate of the Family and Consumer Sciences Division of ACTE. Requests to respond to the survey were repeated twice in the case of those states not responding. Follow-up telephone calls were also made to all state representatives who had not responded to the earlier e-mail notices. Data collection proceeded through June 2004. The final survey response rate from the 50 states and the District of Columbia was 86%.

Two strategies were used to establish national student and staffing estimates. For the three states that reported number of teachers but not number of students, a figure of 146 students per teacher was assigned, representing the average number of students per teacher in the states reporting both teacher and student data. Student and teacher

data for nonresponding states were estimated by dividing the total number of students and teachers respectively from reporting states by the total number of responding states (44) and multiplying by the number of nonresponding states and the District of Columbia (7).

RESULTS

Student Enrollment

An estimated 5.5 million students were enrolled in secondary FCS education programs in 2002–2003 (see Table 1). Program enrollments seemed to be relatively well balanced in terms of gender. At the middle school level (Grades 6–8), 49.7% of students were male and 50.3% were female. Of those enrolled in high schools, 37% were male and 63% female.

Results showed that, overall, enrollments in FCS education had not changed much as a proportion of the total secondary school population since the late 1950s. The 1959 Department of Health, Education, and Welfare study (Coon, 1962) showed that 25.1% of students were enrolled in home economics. Using total secondary school enrollment figures in Grades 6–12 from the National Center for Education Statistics (2003a, p. 59), this study indicates that 25.2% of secondary students were enrolled in FCS programs in 2002–2003 (i.e., 5,517,976 of a total of 21,826,302 secondary school students).

In terms of gender, enrollments were much more equitable than in the past. In 1959, 48.6% of secondary school girls were enrolled in home economics, whereas only 1.3% of secondary school boys were enrolled in such courses.

Teacher Availability

As shown in Table 1, results suggest that there were at least 37,500 FCS teachers working in the U. S. in 2002–2003. States reported that 252 of the teachers in comprehensive (nonoccupational) programs were male, a substantial increase from a 1987 study indicating that only 31 men were seeking or holding FCS licensure (Dohner, Loyd, & Stenberg, 1990). The majority of respondents reported that their states were experiencing a shortage of FCS teachers. Michigan reported a general oversupply but noted teacher shortages in

Table 1. Secondary Family and Consumer Sciences Students and Teachers: 2002–2003

STATES REPORTING	NUMBER OF STUDENTS	NUMBER OF TEACHERS	FCS TEACHER AVAILABILITY STATUS
Alabama	74,387	628	Shortage
Arizona	28,971	516	Shortage
Arkansas	45,395	457	— ^a
California	300,000	1,600	Shortage
Colorado	20,170	400	Shortage
Delaware	9,869	73	Shortage
Florida	242,098	815	Shortage
Georgia	163,713	1,424	— ^a
Hawaii	2,844	48	Shortage
Idaho	20,431	260	Shortage
Illinois	43,951	1,370	Shortage
Indiana	165,000	1,262	Shortage
Iowa	37,628	577	Shortage
Kansas	53,300	573	Shortage
Kentucky	65,520	406	Shortage
Maine	36,500	232	Shortage
Maryland	30,097	1,110	Shortage
Michigan	336,665	1,300	Oversupply
Minnesota	112,321	670	Balanced
Mississippi	29,458	453	Balanced
Missouri	202,129	595	Shortage
Montana	8,794	316	Shortage
Nebraska	65,359	461	Shortage
Nevada	10,261	209	Shortage
New Hampshire	36,400	260	Shortage
New Jersey	173,800	1,400	Shortage
New Mexico	19,808	222	Shortage
New York	666,863	1,007	Shortage
North Carolina	154,871	1,481	Shortage
North Dakota	19,328	201	Shortage
Ohio	228,011	1,749	Balanced
Oklahoma	49,200	452	— ^a
Pennsylvania	250,000	2,150	Shortage
Rhode Island	7,500	150	— ^a
South Carolina	135,762	575	Shortage
South Dakota	11,604	117	Shortage
Tennessee	81,467	620	Balanced
Texas	195,914	3,218	Shortage
Utah	110,397	481	Balanced
Vermont	13,500	90	Balanced
Virginia	120,973	876	Shortage
Washington	82,897	427	Shortage
Wisconsin	252,493	1,050	Shortage
Wyoming	14,600	100	Shortage
Total: reporting states	4,760,607	32,381	
Extrapolated from nonreporting states	757,369	5,119	
Total	5,517,976	37,500	

^aInformation not reported by respondent regarding teacher availability status.

the Detroit metropolitan area and the Upper Peninsula. The states reporting a “balanced” availability of FCS teachers indicated that positions in rural areas were difficult to fill. Several of the respondents expressed concern that schools might be forced to close programs if the supply of teachers did not improve in the near future.

It is difficult to discern exact changes in teacher supply/demand over time because complete data were not available. A data set published in the latest *Digest of Education Statistics* (National Center for Education Statistics, 2003a) suggests that “home economics” teachers represented 1.9% of all public secondary school teachers in 2001, down from 5.9% in 1966. The problem is that “home economics” has not been used as the preferred term for the field for at least a decade. Thus, many locations may not report teacher numbers under that label and may instead either not report the figures or include them in the “other” category. The latter occurrence seems likely given that the “other” category of teachers in what are typically elective subject areas has grown from 1.9% to 6.4% during the same time period, with FCS student enrollment remaining steady in proportion to total student enrollment (Table 2).

Course Requirements and Titles

Of the states responding, three indicated that they had state-level requirements for FCS courses. Florida requires a “life management” course; however, it can be taught by a licensed FCS or health teacher. New York requires all students to take a home and career skills course sometime between Grades 6 and 8. Vermont also requires that students take one semester of FCS between Grades 6 and 8; however, the respondent representing that state indicated that not all districts comply with this requirement.

Thirteen states reported that although they did not have state-level requirements, many local school districts required FCS courses or included such courses as one option in a grouping of required electives. Idaho, Indiana, Maryland, Nebraska, and Wisconsin reported that FCS courses are often required locally at the middle school level. Arizona, Florida, Iowa, New York, North Dakota, Ohio, Pennsylvania, Washington, and Wisconsin reported that FCS courses are sometimes required locally at the middle or high school level, or both. When required at the middle school level, courses were most likely to be comprehensive in nature (i.e., including all areas of study typically associated with FCS) and offered as part of an exploratory course rotation in the areas of career and unified arts. At the high school level, required FCS courses were most likely to be offered in the areas of personal finance/consumer economics, parenting, and life skills/independent living.

Respondents were also asked to identify titles of courses that were popular in their states (based on enrollments as well as perceived future demand). Not surprisingly, a great variety of terms were used to describe the FCS courses that enroll the most students (see Table 3). The occupational courses that were reported as enrolling the most students were culinary arts (often based on the ProStart curricula) and early childhood education.

Issues Associated With Data Collection

Collecting data on FCS secondary programs, enrollments, and staffing is more difficult than would be desirable. Lack of valid and reliable

Table 2. Percentages of Public Secondary School Teachers, by Subject Taught

SUBJECT	SELECTED YEARS (SPRING 1966 TO SPRING 2001)							
	1966	1971	1976	1981	1986	1991	1996	2001
Agriculture	1.6	0.6	0.6	1.1	0.6	0.3	0.5	0.8
Art	2.0	3.7	2.4	3.1	1.5	2.6	3.3	2.5
Business education	7.0	5.9	4.6	6.2	6.5	3.5	4.1	2.4
Home economics	5.9	5.1	2.8	3.6	2.6	3.1	2.2	1.9
Industrial arts	5.1	4.1	3.9	5.2	2.2	2.1	0.5	0.3
Music	4.7	3.8	3.0	3.7	4.8	4.2	4.3	2.9
Other	1.9	3.1	4.0	3.3	3.4	3.9	5.2	6.4

Note. Data were derived from National Center for Education Statistics (2003).

Table 3. Most Popular FCS Course/Program Titles

OCCUPATIONAL PROGRAMS	NON-CAREER-SPECIFIC COURSES
Careers with children	Career and family leadership
Child and day care	Career and life planning
Culinary operations	Consumer resource management
Entrepreneurship	Child development
Food service	Career connections
Hospitality management	Balancing career and family
Hotel and resort management	Cultural foods
Professional baking	Clothing construction
Professional foods	Consumer decisions
Teaching academy	Family dynamics
	Family financial planning
	Family life education
	Fashion design
	Food science
	Foods
	Futures
	Housing and interiors
	Life management
	Nutrition and wellness
	Parenting
	Personal choices
	Preparation for life
	Resource management
	Sports nutrition
	Teen choices
	Teen ecology
	Teen issues
	Textiles and apparel
	Textiles and fashion
	Work and family life

locating the state department of education personnel responsible for “family and consumer sciences data” often proved problematic. Many times, the initial contact did not recognize the term, or the department of education was not the responsible agency. Data collection was possible only after resorting to referring to the program as “home economics” or “life skills” or having calls transferred to a variety of offices until someone recognized the descriptor.

Data retrieval capability also varied. Some state respondents were able to generate a great deal of data, whereas others were able to supply only an “educated estimate” of the numbers of secondary FCS teachers and students. It may be that enrollment data were collected but not accessible to some of the study respondents. It is more likely that complete student and teacher counts are not available in all locations.

data makes it difficult to track changes in enrollments and staffing over time, select representative samples for research on program operations and outcomes, and communicate effectively with local, state, and national policymakers.

One of the challenges in eliciting data is that, although every state has secondary school FCS programs, FCS education leadership varies widely. State staffing patterns range from full-time contingents of multiple members to single part-time consultants who work out of their homes. Variation in the terms used to describe the field makes it difficult to gain access to the individuals responsible for providing leadership. In this study,

However, enrollment data are used by states to distribute Perkins act allocations and to meet accountability reporting requirements, thus suggesting that teacher and enrollment data should be available.

States vary in terms of whether and how federal funding is allocated to FCS programs and, thus, which students are counted. Some states consider all FCS programs (middle school, high school comprehensive, and high school occupational) to be career-technical (and eligible for funding), whereas other states use a combination of definitions. There is also variation in the specific courses that are considered to be part of the FCS

FCS program enrollments and staffing patterns suggest that FCS program offerings are a vital part of secondary education in the U. S. today.

curriculum. Culinary arts, cosmetology, and health were mentioned by respondents as courses not consistently included in FCS counts.

SUMMARY AND IMPLICATIONS

The results of this national survey of FCS program enrollments and staffing patterns suggest that FCS program offerings are a vital part of secondary education in the U. S. today. In 2002–2003, nearly 25% of students were enrolled in FCS courses. Enrollments were much more gender equitable than in the past and more diversified in terms of focus, including occupational as well as family-focused courses. These occupational programs are meeting important current and projected employment needs. The National Assessment of Vocational Education report to Congress (Silverberg, Warner, Fong, & Goodwin, 2004, p. 33) indicated that child care/education and food service/hospitality programs were two of the four fastest growing career and technical education programs and that they were associated with higher than average employment growth.

Only three of the responding states reported state-level requirements that students take a specific FCS course. However, many states reported that local schools and districts had such requirements. More research aimed at discerning the nature of local requirements would be helpful, as would studies investigating the processes that have been used to establish them.

Variations among student-teacher ratios may be due to the length of time students spend in courses or the employment status of teachers (full or part time). For example, a middle school teacher may serve 30 different students every 9 weeks, resulting in a student count of 120 for that one teacher, whereas a culinary arts teacher may teach 30 students for an entire academic year. Although such a task would be difficult, future studies should attempt to determine ratios of teachers-to-individual-students based on a standard unit (i.e., contact hours or school weeks).

The results of this study also indicate that FCS is continuing to experience a serious shortage of qualified teachers. Much remains to be done to address this continuing shortage. Given that pro-

grams enroll fairly equal numbers of male and female students, it would be desirable to focus additional attention on increasing the number of men entering the FCS teaching profession. Similar challenges have been faced and addressed more successfully in the fields of nursing and early childhood education. Recruitment and retention of men in these professions may serve as a model for FCS.

The name of the field seems to continue to present difficulties for those wishing to report and collect data on program characteristics and other issues. This is not surprising given that it has been only a little more than a decade since the official term “family and consumer sciences” was adopted nationally. But there is still work to do to ensure that relevant constituencies use it consistently. In the course of this study, the authors discovered that the National Education Association is still using “home economics” to count teachers and that this designation is still being incorporated into research publications of the U.S. Department of Education (e.g., National Center for Education Statistics, 2003b). These discoveries mirror the experience of Gentzler and Hausafus, who in 2004 conducted a literature review of research on the effectiveness of public school FCS programs. They found that the term “family and consumer sciences” was recognized as an identified keyword in few databases and that the Library of Congress subject listing did not include it. The term “home economics” was the keyword that often produced useful results.

On the basis of the data collected in this study, there are reasons to be optimistic about the future of FCS in secondary schools, but also some continuing challenges for the field. The National Coalition for Family and Consumer Sciences Education will work to maintain open communication about ongoing data needs and issues and welcomes feedback and suggestions from fellow professionals. Opportunities for dialogue with members of the coalition are provided at the national conferences of the ACTE and AAFCS.

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Wisconsin Requires Personal Financial Management Credit for High School

In the Appleton Area School District (AASD) in Appleton, Wisconsin, it is believed that how students manage their money today will affect all of their tomorrows. Indeed, how money is handled in a family has a deep impact on all of its members. The AASD's *Personal Financial Management (PFM)* class not only teaches the specifics of budgeting and handling money, but it also offers students a realistic view of how important it is for them to control their future with the decisions they make. PFM was developed to help students determine how to earn money and how to use it.

Beginning in 2005, PFM became a required one-semester course to be taken at the junior/senior level. Teachers are able to offer a challenging curriculum by staying current with the ever-changing trends in financial information. In this school district, teachers are required to be certified in family and consumer education, marketing, or business and they are required to complete nine graduate credits sponsored by the Wisconsin Department of Financial Institutions in order to be eligible to teach PFM.

Until the 2005–2006 school year, PFM had been a course titled “Living on Your Own,” and the curriculum had focused primarily on the financial impact of family decision-making. The Family and Consumer Education Department recognized the need to address issues of financial literacy more deeply and thus redesigned the

course with the help of state and community professionals, particularly the Fox Cities Financial Literacy Advisory Committee. The business contacts and support used in this program serve as career and technical education resources. Junior Achievement, the University of Wisconsin Extension, and financial institutions such as Community First Credit Union, Wells Fargo Bank, Principal Financial, and Thrivent Financial all partner with the school district to enhance opportunities for students to gain real-life experiences in dealing with financial matters.

This financial literacy program encourages students to develop an understanding of finances, risk, and capital management and educates them in the principles of financial resource management as it relates to the economy and their lives. Students learn how they will be able to achieve personal lifestyle and financial objectives. The class requires higher level thinking skills to solve various real-life financial problems, keeping students interested and involved in learning. Students become comfortable in thinking about money not simply as a means to an end but as a workable tool to be used to create opportunities for themselves, their families, and their communities. —Rita O'Brien, family and consumer education program leader at North High School in Appleton, Wisconsin, was instrumental in establishing a district-level graduation requirement for a course in financial literacy.