

Effectiveness of Secondary Family and Consumer Sciences Programs (1985–2004)

This article highlights results of a review of available literature (1985 to 2004) to substantiate the effectiveness of family and consumer sciences (FCS) secondary-level public school programs. Commissioned by AAFCS, the study found limited research-based evidence supporting the impact of secondary FCS programs. In addition to recommending more research with students to substantiate the effectiveness of FCS education, the researchers encouraged AAFCS to: (a) establish a central database to facilitate access to research conducted with secondary-level FCS programs; and (b) work to have the title *family and consumer sciences* listed as an official subject heading with the U.S. Library of Congress.

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Recognizing the lack of accessible documentation to support secondary-level family and consumer sciences (FCS) programs in a climate of budget constraints and accountability, the Board of Directors of the American Association of Family & Consumer Sciences (AAFCS) distributed a request in December 2003 for a comprehensive review of literature from 1985 to 2004 to substantiate the effectiveness of FCS secondary (Grades 6–12) public school programs (AAFCS, 2003c). This article provides a summary of the research conducted by a team of researchers associated with FCS Education at Iowa State University in response to this request.

FCS educators believe that FCS programs are essential in the lives of students; yet, this literature review did not generate enough research-based evidence to substantiate that belief. A lack of research literature documenting program effectiveness has several possible consequences for the future of FCS programs including: (a) limited federal funding for and (b) the marginalization of FCS programs. Neither of these consequences can be viewed positively for FCS education specifically, nor for the profession, generally. Undoubtedly, there is much that can and should be done.

FCS PROGRAM EFFECTIVENESS

What are the characteristics of an effective secondary FCS program? Would they demonstrate impacts such as achievement on students' knowledge, behaviors and attitudes¹? Would the curriculum have a broad-based conceptual framework that includes critical and creative thinking and problem solving related to present and future applications of skills and concepts? Would such a program be responsive to societal needs as well as legislative requirements? Should an effective program

¹Griggs and McFadden's (1980b) effectiveness study focused on those studies that "assessed the knowledge, attitudes, and/or behaviors" of students (p. 15).

lead students to pursue careers in FCS? Following a listing of these and other criteria that might be valued in research related to the effectiveness of FCS secondary programs, Anderson (1984) noted that “no one supermodel of determining effectiveness has been found by [FCS] educators (or any other educators for that matter)” (p. 164). For this study, effectiveness was defined broadly as that which reveals a difference, an impact, an effect, and/or that which measures achievement in students’ lives. Such breadth in definition, it was hoped, would allow for the inclusion of research performed using various modes of inquiry.

RESEARCH PURPOSE AND PROCEDURES

The purpose of this project was to examine the effectiveness of secondary (Grades 6–12) FCS programs in U.S. public schools. A concomitant purpose was to uncover research to substantiate the role of secondary FCS programs in connection with the *No Child Left Behind Act* (2001) (NCLBA). This study included a review of available research published and unpublished between 1985 and May 2004, and two research surveys conducted with state administrators and professional organization leaders between February and June 2004. This article focuses on findings from that review.

THE LITERATURE REVIEW

The literature review examined published and unpublished research related to the impact of FCS programs in various sources identified through available paper and electronic journals and texts, online databases in *Iowa State University e-Library: Indexes and Abstracts* (2005), through Internet search engines, and online library catalogs for 197 academic institutions known to have had home economics or FCS teacher education programs since 1985. Academic institutions were identified using three sources: (a) AAFCS’ lists of accredited programs (AAFCS, 2003b), (b) *The National Directory of the Family and Consumer Sciences Division of the Association for Career and Technical Education* (1999–2000), and (c) the personal knowledge of researchers and participants in the Family and Consumer Sciences Education Leadership Academy at Iowa State University.

Documents analyzed in this project represent

original research and included studies conducted directly with FCS students, teachers, and stakeholders such as guidance counselors, parents, and administrators associated with secondary FCS programs. Research uncovered through searches in online databases was listed, categorized, and annotated using FCS content areas of emphases and the NCLBA considered germane to the profession by the research team. Limited detail was available for many of the studies identified, especially master’s theses. Research annotations used in content analysis and discussion in this study are available on the *Family and Consumer Sciences Education: Effectiveness of Secondary FCS Programs* Web site (Browne, Myers, Gentzler, & Hausafus, 2004) developed in connection with this project.

DATABASE SEARCHES

The title, *family and consumer sciences*, was rarely recognized as a meaningful entry in electronic databases associated with the academic institutions examined. On occasions when this entry was recognized in library catalogs or academic searches, few relevant listings appeared. Table 1 identifies the keywords used to search databases. The phrase, *home economics study and teaching*, was the keyword search that most often produced salient listings.

The subject listing in the *Library of Congress Online Catalog* (2003) did not include FCS at the time this investigation was conducted, although it included home economics. Library of Congress categories are significant because academic libraries in the U.S. generally use Library of Congress Subject Headings (LCSH) to catalog books. The title, *home economics*, remains the accepted subject heading. Library catalogs are restricted to using that terminology until changes to the LCSH are official.

The name *family and consumer sciences* appeared to a limited extent in the Library of Congress (LOC) listings. If a keyword search was done in the LOC database with FCS enclosed in quotation marks, some information was retrieved. A search for *FCS* on September 21, 2005 produced 29 hits. However, a comparable search using *home economics* produced 6,036 hits.

Table 1. Keywords Used in Searches of Library Catalogs and Other Electronic

Child development study and teaching	Clothing study and teaching
Consumer study and teaching	Family and consumer sciences
Family and consumer sciences study and research	Family study and teaching
Food study and teaching	Health education study and teaching
Home economics	Home economics education
Home economics and mathematics	Home economics and reading
Home economics and science	Home economics and writing
Home economics critical thinking	Home economics study and research
Home economics study and teaching	Home economics teacher
Housing study and teaching	Human development study and teaching
Nutrition education study and teaching	Parenting study and teaching
Personal finance study and teaching	Resource management study and teaching
Textiles study and teaching	Vocational education study and teaching

Each database had its own search limitations and parameters. *ProQuest*, for example, relied on keywords and terminology used by authors in titles and abstracts rather than a controlled vocabulary for keywords. Information not identified in one database emerged in another. Because online databases are constantly being revised, searches done in February 2004 yielded different results than searches done in May 2004 using the same descriptors in the same databases.

Initially, master's thesis and dissertation listings provided by the *Family and Consumer Sciences Research Journal* (FCSRJ) and its predecessor, the *Home Economics Research Journal*, were examined. These data were, however, missing some master's thesis and dissertation references familiar to the research team. Practices related to the submission of master's thesis and dissertation listings were not currently available on the section of AAFC's Web site associated with the *FCSRJ* (AAFC, 2003a). Furthermore, the *FCSRJ* listings of theses and dissertations did not provide descriptions of individual studies. These limitations aside, this source provided an invaluable starting point for this project.

RESEARCH FINDINGS

Publication Format

The literature identified in the data for this project included 396 entries: 178 master's theses, 79 dissertations, 78 journal articles, 38 research presentations, and 23 research reports (see Figure 1). All but one of the dissertations in this database were identified in *ProQuest Digital Dissertations*. However, five of the master's theses were found in

the *Master's Abstracts International* database. Master's theses were more likely to be presented at a professional meeting than published in a professional journal. Twelve of the 257 studies associated with master's theses and

dissertations identified for this study were published in professional journals.

RESEARCH METHODS USED

Descriptions of research methods used were available for fewer than half of the studies included in this review. More than one research method may have been associated with one research listing. Each research method used was counted separately by the research team. The majority of the research, for which descriptions of research methods were available, was survey research, namely 84 studies. Most of the surveys were conducted with teachers. Fifteen studies involved interviews. Thirty studies were quasi-experimental². Other research methods identified in 14 studies in this review included document analysis, ethnography, experimental, phenomenology, observation, naturalistic case study, and other qualitative studies. One hundred and eight studies involved FCS students; 102 included FCS teachers.

FCS SECONDARY PROGRAM EFFECTIVENESS

This review of literature was successful in substantiating the impact of FCS programs in several areas. The lives of teen parents through Ohio's *GRADS* Program provided sufficient evidence to support program effectiveness. FCS-based food, nutrition, and wellness programs were effective in increasing

²The majority of these studies—for which limited information was available—were performed by master's degree candidates. When information was available, these studies often involved small samples.

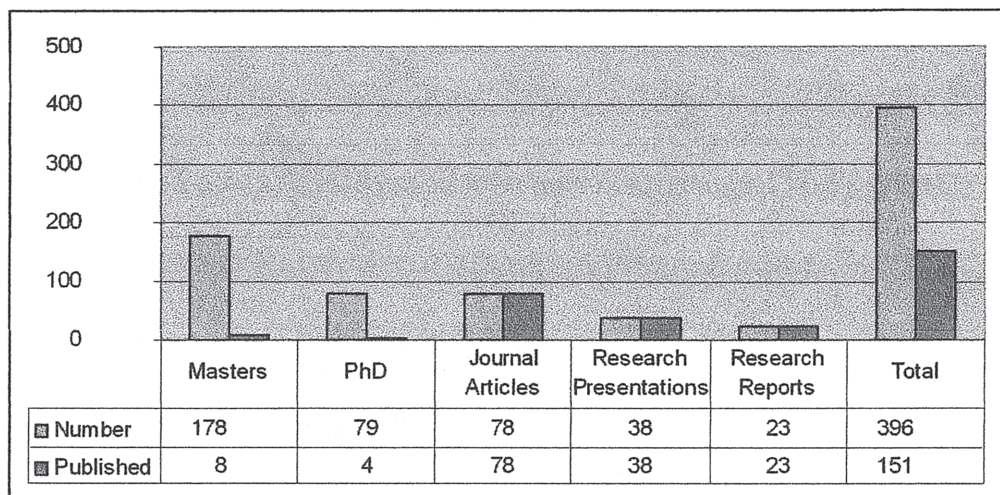


Figure 1. Research Publication Format.

students' knowledge and improving students' attitudes toward nutrition (Ferguson, 1987, 1990).

Studies associated with FCS child, family, and human development programs revealed increases in students' understanding of and attitudes toward this content area. Two studies (Hillman, 2000; Jorgensen, Potts, & Camp, 1993) in this category reported effects on student behavior.

With respect to consumer and resource management studies, Havilli (1996) and Fanslow and Compton (1985) found that students benefited from involvement in free enterprise and entrepreneurship education. Faircloth, Clawson, and Godwin (1986) concluded that students who used computer-assisted instruction in connection with a credit unit in a secondary home economics class scored better than students taught the same unit using supervised reading.

Few studies associated with the impact of traditional FCS content areas of career education; textiles, clothing and apparel; and housing and interior design were identified in connection with this review of the literature. Van Hook (1986) and Vickers (1994) found that extra-curricular and co-curricular programs such as Future Homemakers of America and Home Economics Related Occupations (now Family, Career, and Community Leaders of America) could improve students' confidence and leadership abilities. Studies related to housing and interior design (Emmel & Cummings, 1999; Sockwell, 1996) and textiles, clothing and apparel (Feather, Love, & Dillard, 1987; Webster, 1986) focused largely on

teachers' perceptions of content application in their classrooms.

Previous effectiveness research (Griggs & McFadden, 1980b; Redick, 1996) recommended that future evaluations of home economics program usefulness be conducted on a national basis and replicated to substantiate the value of programs. The only studies identified that approached this goal were those conducted by members of the Home Economics Research Committee associated with the American Vocational Association (AVA³) between 1984 and 1986 (Gritzmacher, Tooke, Pestle, Clawson, Johnson, & Baum, 1988, 1990; Pestle & Baum, 1991; and Williamson, 1988). Studies were conducted in Colorado, Florida, Iowa, Kansas, New Mexico, North Carolina, South Dakota, Tennessee, and Washington. This set of studies used 15 questions, 5 in each of the following content areas: consumer and resource management, nutrition and parenting. This research revealed that graduates who completed three or more semesters of FCS-related coursework could provide correct answers to the 15 questions.

ACADEMIC CONTENT

As can be viewed in Figure 2, the majority of the identified documents were prepared in the 1980s and early 1990s⁴. The 1980s were influenced by

³AVA is now Association for Career and Technical Education.

⁴Four documents included in the review were undated. Three of these were research reports and one was a journal article located on the Internet.

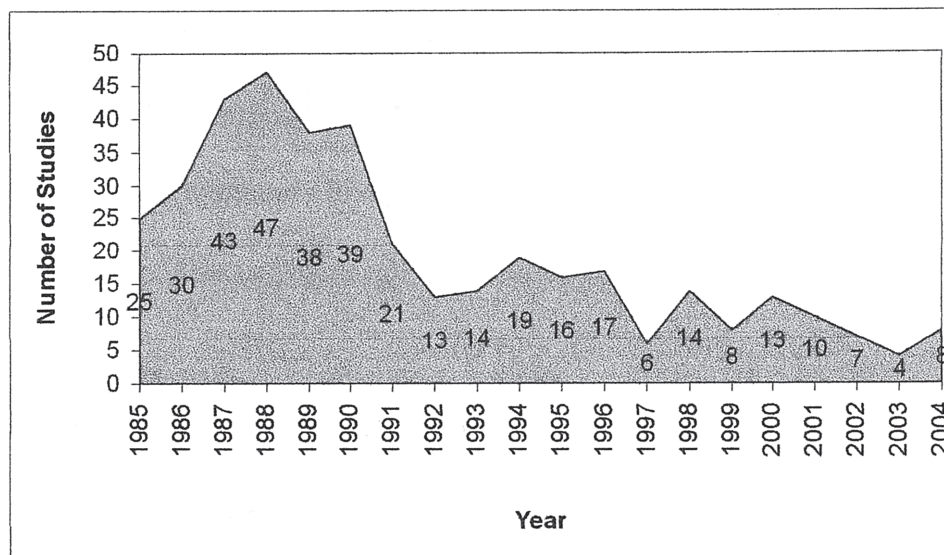


Figure 2. Studies by Year.

legislation such as the 1982 Amendments to the 1963 Vocational Education Act (Legal Information Institute, n.d.) and *A Nation at Risk* (Gardner et al., 1983). Carr and Greene (1990) indicated that the appeal to emphasize basic academic skills has existed since the 1950s. Clearly, the call to demonstrate the role of FCS programs in connection with academic core content basics is ongoing.

This review of the literature did not reveal much research to substantiate the role of FCS programs related to the academic core content areas of reading, writing and/or language arts, mathematics, and science. It should be noted, however, that studies done with mathematics (Parkhurst, 1986; Wu, 1995) and science (Powell & Reagan, 1993) instruction in FCS programs suggested that future research could substantiate the impact of FCS programs on students' performance in academic content areas.

RECOMMENDATIONS

The research team recommended that AAFCS:

1. Solicit and allocate funds to establish and maintain a central database for the purpose of sharing research associated with secondary-level FCS programs. This database should describe research in secondary FCS programs and provide information regarding resources such as state contact information, state standards, state reports, professional organization links reports of professional organization and

FCS Coalition efforts, lesson plans, etc. that are germane to these programs.

2. Have the name, *family and consumer sciences*, recognized in the subject headings by the U.S. LOC and other academic databases and indices in a manner that the profession's connections to home economics historically and internationally are maintained.

3. Develop guidelines for keywords that could be used in databases to connect research done in secondary FCS programs with these programs.

4. Make guidelines for the submission of master's thesis and dissertation research information to the *FCSRJ* available in the journal as well as the AAFCS website.

As a result of this research, FCS professionals, researchers, and research programs are encouraged to:

1. Conduct further research to demonstrate effectiveness of secondary FCS programs related to the role these programs have in supporting academic core content as well as FCS-related content. Specifically, it is recommended that such research be conducted on a larger, national scale than has been done previously and that longitudinal data be collected. This recommendation also was made with previous reviews of the literature (see Griggs & McFadden, 1980b; Redick, 1996). Such research

should focus on students as the data collecting unit rather than teachers.

2. Coordinate a national effort to evaluate secondary FCS students' knowledge and performance related to basic standards in the FCS content areas of food, nutrition, and wellness; textiles, clothing, and apparel; child, family, and human development; career education; consumer and resource management and housing and interior design.

3. Include a variety of research methodologies beyond the predominant survey and quasi-experimental design methods when secondary FCS program effectiveness is examined.

4. Submit master's theses information to *Master's Abstracts International*. Encourage publication of master's research findings related to program effectiveness in professional journals.

CONCLUSION

There is no question that more research needs to be conducted within the profession focused on FCS program impact. Regardless of the research design used, it is imperative that FCS professionals, especially educators and teacher educators, validate program effectiveness to provide evidence that FCS is a viable and essential curriculum in secondary schools in the U.S.

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