

## **A Comprehensive Framework for Family and Consumer Sciences (FCS) in Career and Technical Education (CTE)**

### **Introduction**

Family and Consumer Sciences (FCS) has played a crucial role for over a century, originating with the Smith-Hughes Act of 1917. However, as society evolves, so too does the demand for a more cohesive and formal recognition of FCS as its own career cluster within Career and Technical Education (CTE). This decision is not merely administrative but essential for addressing significant societal issues such as workforce readiness, economic development, and individual well-being. Its relevance and importance remain pivotal across multiple industries (Palombit, 2019).

This unified framework integrates the core components of FCS and emphasizes its value to the career clusters, highlighting FCS's alignment with current labor market demands (Palombit, 2019). FCS programs span across several career clusters, equipping students with critical employability skills, leadership qualities, and foundational life skills, while preparing them for diverse, people-centered careers impacting multiple industries (Cluster Rationale, 2023; Palombit, 2019). Further, Family and Consumer Sciences (FCS) is a global discipline, intersecting multiple sectors like education, business, health services, and human development. FCS offers degree programs in fields such as nutrition, human development, early childhood, family and community services, fashion design, and interior design. The unique interdisciplinary nature of FCS makes it indispensable to the CTE framework and in shaping students' readiness for real-world challenges (Palombit, 2019).

The FCS framework originally emerged from state administrator input about the career pathways supported by FCS in their respective states. A consistent set of clusters and pathways emerged, confirming the need for a formalized framework to guide FCS implementation. This framework aims to:

- **Increase Consistency Across States:** Ensuring that FCS programs are implemented uniformly across the country.
- **Support CTE Program Development:** Helping decision-makers in developing robust and relevant programs of study.
- **Promote High-Quality FCS Programs:** Encouraging educational institutions to deliver top-tier FCS programs that meet both academic and industry standards.
- **Enhance Professional Development:** Providing targeted resources for FCS teachers, students, and administrators, improving the quality of teaching and learning.
- **Facilitate Student Success:** Offering students valuable resources and pathways to achieve career readiness (Cluster Rationale, 2023; Palombit, 2019).

## **Rationale for Family and Consumer Sciences Career Cluster Prominence**

FCS is more than an academic program—it is a discipline centered on people, families, and communities. FCS addresses critical life skills and employability traits that prepare students for a wide range of careers. FCS also encourages FCS-trained professionals to consider the broader impact by addressing societal challenges such as family wellness, public health, and community development while preparing individuals for careers from education, mental health services, culinary arts, fashion, interior design, and more. With its roots in public education, FCS focuses on enhancing the quality of life through research, experiential learning, and application (Cluster Rationale, 2023). It holds a unique role of preparing individuals to lead better lives, strengthen families, and contribute to community well-being, as it develops among students essential employability knowledge and skills, preparing students for rewarding careers.

## **FCS Primary Career Fields**

FCS focuses on multiple career sectors and paths—Culinary Arts and Food Services, Management; Education; Human Services; Hospitality and Tourism; Nutrition and Food Sciences; and Textile Science, Fashion, and Interior Design—and supports the college and career readiness of students. FCS offers a wide range of career pathways, making it essential to identify the sub-sectors that are central to FCS education and training. These sub-sectors include counseling, culinary arts, fashion design and merchandising, early childhood education, consumer science, food science, human development, and interior design, among others (Cluster Rationale, 2023).

## **Culinary Arts and Food Services, Management:**

Through FCS, students gain practical skills in food preparation, meal planning, food safety, and nutrition—skills essential for entry-level positions and foundational for advanced roles. These pathways are crucial for both public health and urban/rural economic development (Palombit, 2019). The food service industry is the largest retail industry globally (The Culinary Pro, n.d.), with employment needs across the spectrum from food prep to food safety, to food management opportunities across multiple settings and the culinary and tourism industry.

### **1. Culinary Arts**

- Through FCS, students gain practical skills in food preparation, meal planning, food safety, and nutrition—basic skills for immediate entry-level food service positions and foundational knowledge for future roles as chefs, dietitians, food scientists, food safety professionals, hospitality managers, and more (FCS Alliance, 2024; Palombit, 2019).
- Family and Consumer Sciences graduates make up, on average, 45% of all graduates amongst reporting institutions in the Food Service career area,

including food science and nutrition, food education, culinary services and more. FCS encompasses a wide range of culinary and hospitality careers.

- The food education industry generates \$98.9 billion annually, with FCS graduates playing a critical role in its success (FCS Alliance, 2024).

## **2. Food Science and Human Nutrition:**

- With nutrition as a foundational pathway course, FCS prepares graduates for careers in food science, nutrition, and agricultural sciences. These professionals contribute to health management and wellness, ensuring food safety and public health (Cluster Rationale, 2023; FCS Alliance, 2024).
- The employment outlook for agricultural and food scientists is expected to grow by 6% from 2022-2032, emphasizing the growing need for expertise in this sector (FCS Alliance, 2024).

### **Education:**

Programs in this field equip students to apply interdisciplinary theoretical knowledge and real-world experiences, preparing them for jobs that provide developmentally appropriate instruction and individual supports delivered within multiple kinds of institutions including early childhood centers, schools, training centers, universities, and more (US Bureau of Labor Statistics, 2024).

#### **1. Early Childhood Education and Human Development:**

- FCS encompasses early childhood education, day care, and human development services, with a focus on nurturing the development of children and supporting families (FCS Alliance, 2024; Palombit, 2019).
- This subsector is essential for preparing individuals for roles as preschool teachers, early childhood administrators, and child development specialists.

#### **2. Education and Training:**

- FCS plays a major role in preparing students for work in the education services sector by applying human development theoretical perspectives across the lifespan leading to jobs including education consulting and educational services, industries expected to grow by 1.8% from 2024-2029 and by 1% from 2024-2029, respectively (FCS Alliance, 2024).

### **Hospitality and Tourism:**

Programs in this field equip students to apply interdisciplinary theoretical knowledge and real-world experiences needed for jobs across the hospitality and tourism industry, including lodging, food and beverage, event management, and tourism and travel, focused on the human experience away from and close to home (American Hotel and Lodging Educational Institute, 2024).

## 1. Hospitality Management

- Through FCS, students are prepared for employment in the hospitality industry and are introduced to all its segments including current trends, current events, front-house/back-house knowledge and skills, and career opportunities that are available through post-secondary education.
- The leisure and hospitality industry is expected to grow 6.1% (2022-2032) (Business Research Company, 2024).

## 2. Event Management:

- FCS includes event management and hospitality training, focusing on the organizational aspects of events rather than just the performance side (FCS Alliance, 2024).
- Meeting, Convention, and Event Planning is expected to increase by 8% from 2022-2032 (FCS Alliance, 2024).

## Human Services:

Programs in this field equip students to apply interdisciplinary theoretical knowledge to real-world challenges, preparing them for critical roles where they will develop an array of prevention and remediation services aimed at improving the quality of life for individuals, families, and communities (Cluster Rationale, 2023; National Organization for Human Services, 2024). These roles include counseling, mental health services, and social work, which address pressing societal issues such as mental health crises, family instability, and community wellness.

## 2. Counseling and Mental Health:

- FCS plays a vital role in mental and physical wellness, with career paths focusing on adult education, health educators, and career counselors. The demand for mental health counselors is expected to grow by 10.6% from 2022-2032, while careers in health education are projected to grow by 7% (FCS Alliance, 2024).
- This subsector overlaps with Human Services but focuses on personal and community well-being through nutrition, mental health, and outreach programs.

## 3. Gerontology and Elder Services:

- As the U.S. population ages, the need for elderly care and gerontology services is expanding. FCS professionals contribute to this field by developing programs to support aging populations, including dementia care, home health services, and financial protection (FCS Alliance, 2024).
- The elder care industry is expected to grow by 2% from 2024-2029, with increasing demand for skilled professionals in elder services (FCS Alliance, 2024).

## 4. Financial Literacy and Consumer Services:

- Focused on personal finance, consumerism, and resource management, FCS prepares students for careers in financial planning, consumer advocacy, and

credit counseling which support individuals and families in their near environments (Cluster Rationale, 2023).

## **5. Health Management and Wellness**

- Focused on administering and assessing workplace health and meeting employee/employer needs, FCS prepares students with interdisciplinary knowledge to meet real-world challenges for careers including human resource administrators, corporate wellness, nutrition, community health, health services manager, insurance professionals, fitness coaches, and health educators. Employment in the Corporate Wellness Services industry is expected to increase by 1.2% from 2024-2029 while the Gym, Health & Fitness Club industry is expected to increase by 2.4% from 2024-2029 (FCS Alliance, 2024).

## **Textile Science, Fashion, and Interior Design:**

Textile science and its related careers are foundational to the fashion and interior design industry. Programs that support these fields equip students to apply interdisciplinary theoretical knowledge and real-world experiences needed for careers in fashion design and merchandising, interior design, textile design and production, and more. FCS students develop skills in design thinking, sustainability, and three-dimensional visualization using advanced technologies like computer-aided design (CAD) software, allowing them to thrive across these creative, STEM industries (Palombit, 2019).

### **1. Textile Science**

- Through FCS, students gain foundational knowledge about fibers, yarns, fabric construction, and finishes, preparing them for post-secondary studies which draw from STEM fields to drive innovation across fashion, interiors, housing, space, defense, and more.
- Current and future trends across the textile industry will address sustainability, novel materials, smart textiles, and the “use of artificial intelligence (AI) in the advanced textile industry” (O’Mahony, 2024).

### **2. Fashion Design and Merchandising:**

- FCS goes beyond aesthetics in fashion design by integrating textile science, sustainability, and supply chain management into the curriculum (FCS Alliance, 2024).
- Careers in this subsector range from textile workers to fashion designers, with employment in independent fashion design projected to grow by 3.4% from 2024-2029 (FCS Alliance, 2024).

### **6. Interior Design and Housing:**

- FCS professionals in this subsector specialize in consumer safety, sustainability, and housing regulations. Interior designers with an FCS background incorporate sustainability and accessibility into their work, making homes safer and more efficient (FCS Alliance, 2024; Palombit, 2019).

- The interior design industry is projected to grow by 4% from 2022-2032, driven by demand for sustainable and inclusive living spaces (FCS Alliance, 2024).

## **Leadership Development, Employability Skills**

FCS not only prepares students for specific career paths but also equips them with essential employability and leadership skills. Through the Family, Career, and Community Leaders of America (FCCLA), FCS students gain valuable experience in critical thinking, problem-solving, and community leadership (FCS Alliance, 2024; Palombit, 2019).

The Perkins V legislation reinforces the importance of employability skills, which are emphasized through FCS education. Across the multiple pathways, soft skills such as communication, teamwork, and financial literacy are practiced. These skills are highly transferable across industries, making FCS graduates adaptable in a dynamic job market and able to meet the needs of employers (Cluster Rationale, 2023; FCS Alliance, 2024).

## **Anchor for Career Ready Practices**

The discipline of Family and Consumer Sciences is founded on integrative, scientific, critical, and ethical reasoning to examine and address issues impacting individuals in the interrelated spheres of family, workplace, commerce, and community. Concerned with developmental stages across the lifespan, and meeting the physical, social, emotional, and intellectual needs of individuals and families in context, students across FCS pathways develop responsibilities that lead to productive citizenship that are important for their future work. FCS pathways prompt students to consider the environmental, social, and economic impacts of personal, family, and community decisions, strengthening global and sustainability perspectives, which frequently are tied to health and financial well-being. Through problem- and project-based learning, students demonstrate creativity, innovation, perseverance, socio-emotional skills, and develop strategies to confront adversity, as they consider ways to resolve complex problems surrounding each pathway and the people they serve. Throughout, students use evidence-based research strategies and technology applications to solve problems across all FCS pathways (Duncan, 2018).

The following FCS concepts and practices are key to advancing the career ready practices among students and have particular relevance to each career ready practice (see Table 1):

- FCS Body of Knowledge
- Reasoning for Action Standards
- FCS Laboratory Experience
- FCCLA



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Leading as a Contributing & Professional Employee	Communicate Clearly, Effectively, & With Reason	Think Critically to Make Sense of Problems & Persevere in Solving Them	Collaborate Productively While Using Cultural & Global Competencies
–FCCLA –Laboratory Experiences –FCS Body of Knowledge	–Reasoning for Action Standards –FCS Body of Knowledge	–Reasoning for Action Standards –FCS Body of Knowledge	–Reasoning for Action Standards –FCS Body of Knowledge
Using Digital Skills & Technologies to Enhance Productivity & Make Data-Informed Decisions	Remain Resilient in a Changing Workplace & World of Work	Manage Time & Space Effectively	Demonstrate a Creative & Innovative Mindset
–FCS Body of Knowledge	–Reasoning for Action Standards –FCS Body of Knowledge	–FCCLA –Laboratory Experiences	–Reasoning for Action Standards –FCS Body of Knowledge
Act as a Good Steward of Organizational & Personal Finances & Resources	Navigate an Education & Career Path Aligned to Strengths, Work Style, Interests, & Goals	Consider the Environmental & Social Impacts of Decisions	Apply Appropriate Academic & Technical Skills
–FCCLA –FCS Body of Knowledge	–FCCLA –FCS Body of Knowledge	–Reasoning for Action Standards –FCS Body of Knowledge	–FCCLA –Reasoning for Action Standards

Table 1. FCS Education Contributions to Career Ready Practices

## Commitment to Rigor for Students and Their FCS Teachers

Students enrolled in FCS pathways are well positioned to sit for credentialing exams that lead to industry--recognized credentials (IRCs), which are essential for career advancement in various sectors. The American Association of Family and Consumer Sciences (AAFCS) FCS Credentialing Center offers the Pre-Professional Assessment and Certification (Pre-PAC) series, a set of nationally recognized, standards-based assessments. These exams are designed to be relevant, reliable, and rigorous, ensuring that students are prepared for real-world challenges and can demonstrate the skills that employers value (AAFCS, 2024).

FCS education is anchored by rigorous national standards that serve as the foundation for all FCS career pathway coursework at the middle and secondary levels, including the Reasoning for Action Standard, mentioned above. These national FCS standards are regularly reviewed and revised by LEAD FCS Education to ensure they remain relevant and effective. Additionally,

the FCS standards inform state-level content standards across many states in the U.S. Importantly, they are also aligned with the FCS National Teacher Education Standards, which guide educator preparation programs nationwide.

## **Conclusion**

FCS is a distinct industry sector that supports a wide range of industries including education, health services, hospitality, design, and social work. Its purposes are unique compared to other career clusters. The demand for FCS-trained professionals continues to rise across industries that directly impact families, communities, and consumers (FCS Alliance, 2024). Additionally, both the Bureau of Labor and Statistics and the U.S. Department of Education recognizes the significant contribution FCS plays in career readiness and workforce development (Cluster Rationale, 2023; Palombit, 2019). The National Advance CTE Career Clusters Framework currently includes many FCS-related careers under various clusters.

By integrating FCS across CTE course offerings, educational institutions can better prepare students for a wide array of careers that are vital to modern society. FCS not only promotes individual well-being and family strength but also supports the economy by equipping students with the skills to succeed in diverse industries. Recognizing FCS for its contributions to career readiness is crucial to meeting the growing demands of industries that rely on the unique skills FCS graduates provide. The FCS Framework serves as a comprehensive guide to ensuring that students are prepared for both immediate and long-term success in their personal, academic, and professional lives.

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Chat GPT was used to merge Palombit (2019) and the Rationale for Establishing a Family and Consumer Sciences Career Cluster (2023); and to integrate FCS Alliance (2024).

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