

Journal of Education and Training Studies
Vol. 12, No. 2; April 2024
ISSN 2324-805X E-ISSN 2324-8068
Published by Redfame Publishing
URL: http://jets.redfame.com

Weaving Pathways: The Role of High School Family and Consumer Sciences Courses in Cultivating a Teacher Pipeline Across the Midwest

Micheal P Rowley¹, Elizabeth M Wilkins²

¹Illinois State University, USA

²University of Southern Indiana, USA

Correspondence: Micheal P Rowley, Illinois State University, USA.

Received: December 6, 2023 Accepted: January 22, 2024 Online Published: February 1, 2024

doi:10.11114/jets.v12i2.6589 URL: https://doi.org/10.11114/jets.v12i2.6589

Abstract

High School Family and Consumer Science classrooms hold the potential for university and high school partnerships for teacher education pipelines. This study uses a comparative policy analysis to provide a regional resource for laws, policies, and programs within the Midwest regarding FCS classrooms and courses that are offered. Utilizing a comparative policy analysis approach, the aim is to create an opportunity for guiding current high school students toward becoming future candidates in teacher education programs by doing intentional outreach. This analysis will provide an outline of how university Teacher Education programs can partner intentionally to recruit and mentor incoming first-year college students while they are learning educational pedagogy in their high school FCS classrooms. This analysis provides a foundation for how high school FCS classrooms and university teacher education classrooms can foster cohesive and supportive mutually beneficial partnerships in the states surrounding Illinois and Indiana. Data were gathered by accessing regional education department websites and illustrating the potential opportunities for high school coursework to connect with established teacher education university programs and align pedagogically. Key findings include multiple opportunities in the Midwest for partnerships that are mutually beneficial and are easily accessible if intentional connections are made between faculty.

Keywords: family and consumer sciences, teacher education pipeline, access to opportunity

1. Introduction

Across the nation, universities have been desperate to address the decreasing trend of incoming teacher education majors. Conversations in many teacher education departments focus on recruitment initiatives. As both researchers were prompted to find solutions to the smaller cohort sizes, researchers both realized there was an untapped potential pool of future teachers just sitting in high school classrooms across the Midwest. These high school students were already taking courses related to early childhood, education, and teaching pedagogy, and they were enrolled in their high school's Family and Consumer Sciences programs. This paper seeks to bring awareness to the many existing educational spaces that are underutilized and often left out of the school-university engagement initiatives to recruit potential students into enrolling at local two-year and four-year institutions.

Family and Consumer Sciences (FCS) in the United States represents the contemporary iteration of Home Economics. This field encompasses a diverse array of subject areas, extending well beyond the conventional domains historically linked to Home Economics. Typical secondary-level courses in Family and Consumer Sciences (FCS) classrooms encompass a variety of subjects such as human nutrition, culinary arts, food science, human development, early childcare, fashion design, interior design, consumer management, financial literacy, education, and training. FCS programs fall under the Career and Technology Education umbrella, guided by the Carl D. Perkins V legislation. This legislation establishes pathways of courses designed to progressively enhance expertise in specific career fields. Stone (2017) speaks to "the important role of career and technical education in helping young people begin the transition to a lifelong role as a productive citizen in a rapidly evolving labor market" (p. 155). This is evident in how we can expand teacher education courses to encourage student participation and create a pipeline into education programs.

Researchers are specifically looking into current state-led initiatives and existing FCS programs to generate more opportunities for high schoolers to do cadet or professional training before admission into teacher education programs. One potential pitfall is the lack of existing pathways. These partnerships between high school and university education

programs are under the dual credit model and typically do not include education as courses that are transferable into the university's teacher education program. There is little guidance in high schools to push students who are interested in becoming P12 (preschool to twelfth) educators onto this specific track. This research looks to not only examine possible intentional pathways but to provide Midwest state policy, through the comparative policy analysis methodology, to illustrate the untapped opportunity of these high school education classrooms.

By intentionally building strong partnerships between school communities and university teacher education programs, specifically through partnering with existing Teacher Education cadets and FCS classrooms, we argue that this could be a crucial way to support high school students and help them transition to academics and into a teacher education program. This specific pathway into higher education could hold potential to revolutionize how teacher education works with and recruits high school students. The goal of this research is to bring awareness to the strong connections that exist between these two pathways by seamlessly integrating classroom learning at the high school level and connecting with higher education faculty who can provide real-world engagement. These partnerships have the potential to foster a truly dynamic learning environment that empowers students and gives them the experience that is needed as they transition into higher education, and as they begin to understand how different the two education spaces are. This established relationship between higher education and schools is mutually symbiotic and enriches the classroom experience as it lays the foundation for a more inclusive, effective, and responsive educational landscape. This partnership truly benefits students and the community that universities serve yet is underutilized.

Readying for the Enrollment Cliff

Universities across the United States are currently preparing for the "enrollment cliff." This drastic drop for incoming first-year students is destined to occur in 2026 and will include a 10% drop in enrollment and applications to both two-year and four-year institutions in the Midwest (Grawe, 2021). According to the Western Interstate Commission for Higher Education, "Most of the states in the Midwestern region are projected to produce fewer [high school] graduates by the mid-2030s than they currently do. Illinois and Michigan experienced declining numbers of graduates, and Ohio graduate numbers were stagnating, even before the Class of 2019 graduated." Knowing that the 2026 academic school year will signify the ongoing and steady decline of enrollment, universities have had to think about strategies to stay afloat financially.

At present, there is limited research exploring the potential utilization of existing Family and Consumer Sciences (FCS) classrooms that align with educational pedagogy. This study examines eight states in the Midwestern United States that have statewide FCS courses that are actively providing instruction that uses teacher education program standards, this allows students to receive a pedagogically appropriate and equitable course experience to students who are enrolled in education courses at the university.

Conversations and brainstorming sessions have already begun at the institutional level to engage in marketing, financial support, and programming to entice incoming freshmen to enroll and stay enrolled at the institutions. Anecdotally, this enrollment cliff has caused universities to become more creative in how they market their specific majors and programs, often creating "living-learning communities," spaces where students in the same major mentor each other and live together on campus, education cohort models where students enroll in the same courses and provide the opportunity for collegial networking and peer support, and school-university partnerships to provide the opportunity to be on a university campus multiple times in the high schoolers junior and senior year. Departments of teacher education, which have nationally struggled to produce enough licensed and certified teachers have also looked for opportunities to engage high school students and those who are undeclared to choose education preparation programs. While community culture is important, the creative shift has allowed the opportunity to think about the needs of the students and to begin to appeal authentically to the needs of students, thus serving them better at the institutional and departmental levels.

Connecting High School Coursework to Higher Education Pedagogy

Specific engagement with FCS classrooms at the junior and senior level can provide much-needed support for future incoming first-year students as it allows these students to experience firsthand the practical pedagogical practices utilized in the higher education classroom. This pedagogical practice of inquiry-based learning allows high school students to see the emphasis on the layers of development between teaching, learning, and learning to teach. (Cheng & So, 2012) The purpose of the high school education pedagogy classes, offered through the FCS programming, aims to provide students with experiences that they can continue to build on as they move into higher education and enroll at partnering institutions. These foundational FCS classes give students early, authentic ways to engage with pedagogy and education, understanding. Further engaging with Piaget's theory of constructivist principles, high school students are exposed to material early providing students with a chance to better understand their own educative experience actively, rather than passively. By creating fieldwork and high school mentorship opportunities, students can better grasp pedagogical concepts as they move through the teacher education programs.

Since high school teachers have daily interactions with students, their understanding of the college transition and their capacity to support students can directly impact student success. With more students being pushed to attend two-year or four-year institutions, the role of the high school has shifted to include preparing students not only academically but also by providing access to information related to each step in the college matriculation process (Conley, 2005). By partnering in the students' junior and senior years, students are provided the exposure to collegiate-level learning and expectations, and the partnership between teacher education programs and high school FCS classrooms can provide a level of support for students who may have struggled with the transition right out of high school (Barnett, 2016). Barnett et al., (2018) continue this purposeful discussion by articulating the purpose of inquiry-based learning, and how it can be an innovative way to focus instruction on topics that high school students have a high interest in, engaging them authentically in areas that they would pursue further in their two-year or four-year degrees.

Guided Pathways Between Institutions

Researchers propose that this pipeline's collaborative nature would encourage students to continue their education studies. Trimble et al., (2021) posits that without the network of support students may transition to university and doubt their ability, this could discourage the student from continuing their postsecondary education. Thus, the need for the partnership aims to be more supportive than just a pipeline of students entering the field. Bailey et al., (2015) illustrate the bolstering of partnerships by calling them guided pathways. The guided pathway creates cohorts of students who are interested in the same program, (Barnett, 2018b) in this case, education, and connects high school students to a network of support systems at both the high school, their peers, and the university faculty and staff.

2. Comparative Policy Analysis as a Method of Inquiry

Within the United States public compulsory schools are mainly governed by policy decisions that happen above the individual level. Levin (2009) states "local education can be deeply affected by policy decisions at higher levels of the political system" (p. 183). Researchers explored if there is a relationship between existing policies surrounding the use of secondary courses that introduce students to the education profession, partnerships with university teacher education preparation programs, and the teacher pipeline a comparative policy analysis (CPA) was selected as the methodology for this study. Caner Bakir (2022) notes the relationships that exist between factors that influence policy decisions and policies themselves. Policies are shaped by various stakeholders and structural components that continuously reshape these policies, stakeholders, and structures themselves as time moves on. As such individual states are going to have policies that are different from each other but may influence those within nearby geographic locations. Tanja Klenk, et al (2022) points out that policies and their implements are tools that can be wielded "to prompt (or prevent) social change" (p. 130). This perspective can be applied to the challenges within the teacher education pipeline addressed in the literature, examining how state governments utilize or hinder course partnerships to address the ongoing teacher shortage.

Our guiding research questions for this comparative policy analysis are:

- 1. What current partnerships exist in the Midwestern United States between high school Family and Consumer Sciences classrooms and university teacher education preparation programs?
- 2. If states have current Family and Consumer Sciences courses offered in high schools, what are the relevant course descriptions that could be aligned to teacher education preparation programs?

The states selected for this study were Illinois, Indiana, Iowa, Kentucky, Michigan, Missouri, Ohio, and Wisconsin; all eight of these states share at least one land border. Researchers then collected text-as-data from each state's education governing agency about the secondary family and consumer sciences courses that they offered which introduced or discussed the education profession as a career option to students (Table 1). Guswin de Wee (2021) highlights that the text-as-data approach has been historically underutilized but can be highly beneficial to comparative policy analysis methodologies. Additional data was collected on existing partnerships between these secondary courses and universities within that state, and on the course descriptions of these education courses offered at the secondary level (Table 2). Many of these partnerships result in the secondary student being able to earn credit for one or more university-level professional teacher education courses by completing the secondary family and consumer sciences education course. These partnerships can be viewed as policy tools, which Giliberto Capano and Michael Howlett (2020) iterate are mechanisms "through which governments generate, evaluate, and implement policy options" (p. 1).

After these data were collected, researchers utilized the conceptual framework constructed from the review of existing literature to analyze these data for common themes. This information not only allows us to examine the overarching themes that arise from these issues; it also allows us to compare how individual states approach these educational policy issues such as the teacher shortage. Wiggan et al., (2021) note that the current teacher shortage within the United States is believed to be caused by multiple factors that compound together. Some of these factors are directly impacted or governed by policy decisions, such as economics or pay and working conditions within public compulsory schools; or trickle down

from the impact of policy decisions into the social consciousness such as our perceptions of the workload for public teachers or the public's valuation of teaching as a profession. These are additional reasons why researchers examined policies surrounding entry to the teaching pipeline. Many factors surrounding these questions go beyond the capability of an individual person to change and require policy changes at the institutional or a governing body level to allow the creation of opportunities to enter the teaching pipeline.

3. Family Consumer Science Department of Education Programs

For this comparative policy analysis, researchers chose to centralize Illinois and Indiana to examine policy and educational opportunities through partnerships in the surrounding states. Illinois, Indiana, Iowa, Kentucky, Michigan, Missouri, Ohio, and Wisconsin were examined to see what, if any, programmatic opportunities exist for high school students interested in entering education programs at two-year and four-year institutions. By first gathering Midwestern statewide policy and course-specific information, the researchers were able to create a reference of both courses taught in each neighboring state, as well as any established university partnerships and educational preparatory programs to either create a pipeline or a guided pathway cohort model.

Surrounding State Course Offerings

The table below shows the state programs currently being offered according to the most updated department of education data. Each state has specific courses that are offered in the FCS track. These courses can be offered either at the high school or through dual credit with the university. As indicated, several states surrounding both Illinois and Indiana do not have programs available to create a stable pipeline from the high school classroom to the university classroom.

Table 1. Midwestern Potential Pipeline Partnerships by State

	Secondary Course(s) Offered	Connection to University Programs
Illinois ^a	Foundations of Teaching Educational Methodology	-
Indiana ^b	Classroom Management Foundations of Teaching Educational Methodology Classroom Management	Teaching & Learning- Using Computers in Education Education Professions Capstone- Various, usually The Exceptional Child
Iowa ^c	Only offers early childhood education courses	-
Kentucky ^d	Fundamentals of Teaching Co-op Fundamentals of Teaching Internship Principles of Teaching	Introduction to Education Introduction to Technology in Education Cultural Responsiveness Classroom and Learning Management *Participation in the program grants admission to Kentucky State University
Michigane	Career Exploration in Education and Training Fundamentals of Education Professions Application of Education Professions	The American School Foundations of Education Childhood Development
Missouri ^f	Career Pathways to the Teaching Profession Early Childhood Careers Practicum in Teaching Pathways Pathways for the Teaching Profession and Practicum in Teaching Profession Pathways to the Teaching Profession	-
Ohio ^g	-	-
Wisconsin ^h	Intro to Education Foundations of Teacher Education *Instructor does not need to be a Family Consumer Sciences or Career and Technology Education teacher	-

Note Data are from the Illinois State Board of Education (2023)^a, Indiana Department of Education (2023)^b, Iowa Family & Consumer Sciences (2023)^c, Kentucky State University (2023)^d, State of Michigan Articulation Agreements (2023)^e, Missouri Department of Elementary and Secondary Education (2023)^f, Family and consumer sciences Ohio Department of Education (2023)^g, and Regional career pathways Wisconsin Department of Public Instruction (2023)^h.

Table 1 provides an overview of secondary courses offered in several states, including Illinois, Indiana, Iowa, Kentucky, Michigan, Missouri, Ohio, and Wisconsin, in the context of their connection to university teacher preparation programs.

The table outlines specific courses offered in each state, such as Foundations of Teaching and Classroom Management, and highlights the relationship between secondary education coursework and potential pathways to university programs. Notably, Kentucky's program offers a direct link to admission to Kentucky State University upon completion. The table emphasizes the overlap and alignment between Family and Consumer Sciences (FCS) courses and higher education teacher preparation.

The notable aspect of the presented table lies in the strategic alignment between secondary Family and Consumer Sciences (FCS) courses and higher education teacher preparation programs. Specifically, the table underscores how certain states, such as Kentucky, have established a structured pathway where completion of FCS courses not only contributes to secondary education but also serves as a direct route for admission to a university, in this case, Kentucky State University. This linkage between secondary FCS education and university teacher preparation programs signifies a deliberate effort to integrate and streamline the educational journey, potentially facilitating a smoother transition for students aspiring to become educators. It highlights a proactive approach to connecting practical, hands-on FCS coursework with broader academic and professional development in education.

State Policy Course Information Analysis

In Table 2 below, data are organized by state, and then the individual course offered through the institution at a dual credit opportunity, or through the Career and Technical Education (CTE) across the state. Specific course descriptions were provided so that programmatic conversations can connect the university to the potential high school that has the established CTE programs available for student enrollment.

Table 2. Midwestern Courses to Build Teacher Education Pipeline

State	Courses Offered	Course Descriptions
Kentucky ^a	200291 Fundamentals of Teaching Co-op	Cooperative Education for CTE (Career and Technical Education) courses provide supervised work site experience related to the student's identified career pathway. A student must be enrolled in an approved pathway course during the same school year that the co-op experience is completed or have already completed the pathway the previous year. Students who participate receive a salary for these experiences, in accordance with local, state, and federal minimum wage requirements according to the Work Based Learning Guide.
	200292 Fundamentals of Teaching Internship	Internship for CTE (Career and Technical Education) courses provides supervised work site experience for high school students who have completed courses leading to a career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. Students receiving pay for intern experience are those participating in an experience that is a semester or longer and have an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis.
t i l I c c c c f f I	This course provides opportunities for students with an interest in teaching to develop skills, strategies, and techniques used for instruction at various grade levels for a diverse population of student learners. Instruction addresses the principles and procedures for promoting the physical, emotional, social, and intellectual development of children, adolescents, and developmentally appropriate practices in educational settings. Students will gain work experience in classrooms with certified teachers as part of their course work. Other components include the development of a four-year post-secondary plan, teacher evaluation system requirements, Kentucky Code of Ethics, and educational pedagogy. Leadership experiences will be provided through various extra and co-curricular student organizations. This course can be taught by any CTE teacher with a Rank II and 5 years of teaching experience.	
Illinois ^b	19151A001 Foundations to Teaching	This course introduces students to the principles underlying teaching and learning, responsibilities and duties of teachers, and strategies and techniques to deliver knowledge and information. A combination of classroom and field experiences will enable the student to gain skilled knowledge and understanding of the education profession. Course content includes projects to develop an understanding of the learner and the learning process, instructional planning, the learning

environment, assessment and instructional strategies, career opportunities in the field of education, and Illinois regulations and licensing requirements.

19152A001 Educational Methodology CTE Course

This course provides an opportunity for students to develop skills to teach and guide others. Coursework includes opportunities for students to create and develop teaching objectives, design lesson plans, and experience teaching in a controlled environment. Students examine and practice teaching strategies, learning styles, time management and planning strategies, presentation and questioning skills, classroom management, and evaluation techniques. Students will explore opportunities in education careers and develop/expand their career portfolio.

19154A001 Classroom Management CTE Course

Classroom Management courses present best practices in classroom and behavior management. Topics will include organizing time, instruction, materials, and classroom space; strategies for managing individual and 19 Human Services 306 large group student behaviors; developing relationships with students, staff, and parents; managing transitions, lab activities, and other arrangements for classrooms in general and special education.

Indiana^c 7161 Principles of Teaching

This course provides a general introduction to teaching. Students will explore educational careers, teaching preparation, professional expectations, and requirements for teacher certification. Current trends and issues in education will be examined. A minimum of 20 hours of classroom observation experience is required for successful completion of this course. Recommended Grade(s): 9, 10, 11 Required Prerequisites: none Recommended Prerequisites: none Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum. Counts as a directed elective or elective for all diplomas.

7162 Teaching and Learning

Teaching and Learning gives students the opportunity to apply many concepts they learned throughout the Education Professions pathway. In addition to a focus on best practices, this course will introduce the role that technology plays in the modern classroom. Through hands-on experience with educational software, utility packages, and commonly used microcomputer hardware, students will analyze ways to integrate technology as a tool for instruction, evaluation, and management. Recommended Grade(s): 10, 11, 12. Required Prerequisites: Principles of Teaching Recommended Prerequisites: none Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum. Counts as a directed elective or elective for all diplomas.

7267 Education Professions Capstone

The Education Professions Capstone provides an extended opportunity for field experience to further apply concepts presented throughout the pathway. Students will also have the chance to explore the exceptional child and literacy development through children's literature. Students will gain a deeper understanding of inclusive teaching techniques along with policies, theories, and laws related to special education. Students interested in pursuing a career in Elementary Education are encouraged to also study the benefits of using children's literature in the classroom. This course may be further developed to include specific content for students interested in pursuing a career in secondary education. The course should include significant classroom observation and assisting experience. Recommended Grade(s): 11, 12 Required Prerequisites: Principles of Teaching; Child and Adolescent Development, Teaching and Learning Recommended Prerequisites: none Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum Counts as a Directed Elective or Elective for all diplomas.

5976 Education and Training: Special Topics

Special Topics is an extended learning experience designed to address the advancement and specialization of careers within the career cluster through the provision of a specialized course for a specific workforce need in the school's region. The learning experience is at a qualified site and is designed to give the student the opportunity to practice technical skills previously learned in the classroom all while working under the direction of an appropriately licensed professional. Throughout the course, students will focus on learning about employment opportunities at a variety of entry levels, an overview of the career cluster, teams, and legal and ethical considerations; and obtaining the knowledge, skills, and attitudes essential for success in specific occupations. Course standards and curriculum must be tailored to the specific profession, preparing students to advance in this career field, and where applicable, provide students with opportunities for certification or dual credit. This course also provides students with the knowledge, attitudes, and skills needed to make the transition from high school to postsecondary opportunities, and to work in a variety of careers. Students are encouraged to focus on self-analysis to aid in their career selection. Job seeking and job maintenance skills, personal management skills, and completion of the application process for admission into a post-secondary program are also areas of focus. Participation in a related CTSO encourages the development of leadership, communication and career related skills, and opportunities for community service. Recommended Grade(s): 11, Required Prerequisites: none Recommended Prerequisites: CTE courses that would help prepare the student for success in this area. Credits: 1 semester course, up to 3 credits per semester, May be offered for successive semesters up to 12 credits. Counts as a directed elective or elective for all diplomas. Schools must have an approved Nonstandard Course Waiver on file to be eligible for CTE Funding.

6140 Advanced Career & Technical Education, College Credit

Advanced Career and Technical Education, College Credit is a course title covering any CTE advanced course offered for credit by an accredited post-secondary institution through an adjunct agreement with a secondary school. This course's intent is to allow students to earn college credit for courses with content that goes beyond that approved for high school credit. This course may be used for any dual enrollment course, including a joint program of study involving a postsecondary partnership. Recommended Grade(s): 11, 12. Required Prerequisites: none. Recommended Prerequisites: CTE courses that would help prepare the student for success in this area. Credits: 1 semester course, up to 3 credits per semester, May be offered for successive semesters up to 12 credits. Counts as a directed elective or elective for all diplomas. A student should earn at least 3 postsecondary credits for each high school credit. Schools must have an approved Nonstandard Course Waiver on file to be eligible for CTE Funding.

Note Kentucky State University Dual-credit (2023)^a, Illinois State Course Catalog (2023)^b, Indiana Department of Education (2023)^c,

This comprehensive overview of teaching-related courses in Kentucky, Illinois, and Indiana holds considerable importance for educators, policymakers, and students alike. Beyond providing a clear educational trajectory, it reflects a commitment to shaping well-rounded and prepared future educators. The strategic alignment of courses in Kentucky with admission to Kentucky State University not only streamlines the educational journey but also underscores the collaborative efforts between secondary and higher education institutions. The emphasis on practical experiences through co-op, internship, and capstone programs speaks to the recognition of the value of hands-on learning in cultivating effective teaching skills. Furthermore, the inclusion of specialized content in courses such as Classroom Management and Education and Training: Special Topics demonstrates a nuanced understanding of the diverse facets of the teaching profession, ensuring that students are exposed to a range of skills relevant to contemporary educational needs.

Moreover, the table highlights the evolving nature of education, acknowledging the importance of technology and inclusivity. Courses like Teaching and Learning in Indiana incorporate the role of technology in the modern classroom, reflecting the need for educators to adapt to changing educational landscapes. The provision of capstone experiences, particularly in Indiana, delves into inclusive teaching techniques, literacy development, and the nuances of special education, recognizing the multifaceted responsibilities that educators often encounter. This nuanced approach prepares students for the profession's challenges and instills a broader understanding of the diverse needs of students and classrooms. The information in the table serves as a foundation for building strong partnerships between secondary

schools and universities, fostering collaboration that benefits both educators and students as they navigate the educational pathway from secondary to higher education in the field of teaching.

4. Discussion

From these data we see that out of the eight states examined, seven states offer a secondary course that offers an introduction into teaching as a career. Out of those seven states only three currently have existing partnerships that allow students to earn university credit for taking these courses (Table 1). When looking at the course descriptions of these secondary education courses, many share similarity thematically to the content covered in these courses even if they have different titles (Table 2). These potential partnerships could offer support to secondary students and institutions of higher education utilizing resources that already exist. For four states from our sample, it could be the expansion of course offerings and policy implementation that formalizes these types of partnerships. For the three states that have existing partnerships, it could be beneficial to increase awareness of existing partnerships while also expanding access via policy implementation of additional partnerships. This leaves only one state from our sample that does not have existing tools in place to implement these partnerships. However, they do have base components that can be expanded through additional policies that could make these partnerships a viable option.

While both researchers understand that not all partnerships can occur, establishing and nurturing the relationship between high school FCS courses and teacher education programs have the potential to create a thriving and dynamic connection that is mutually beneficial for both parties. These collaborations can create a seamless and purposeful transition into higher education, providing support for students well-prepared for the rigors, joys, and learning opportunities of higher education. Through these collaborative initiatives students benefit from a comprehensive approach to learning educational pedagogy, and have the space to learn on the fly, through real-world mentorship and real-world application of concepts taught in the FCS courses. Additionally, partnerships allow relationships to form, thus creating a progression of knowledge and skills across levels. Moreover, these partnerships provide guidance and exposure to diverse perspectives, learning authentic skills and enhancing a student's personal growth through application.

While this study is brief, it does illustrate the untapped resources that many states are either unaware of or have yet to establish a pathway connection between school sites and higher education bodies. By working together and building a pipeline from FCS classrooms to teacher education programs, there is a collective promise to produce well-rounded, prepared, and capable future teachers who have the experience and confidence to tackle the challenge of a classroom. These partnerships empower students and contribute to the enrichment of educational institutions and the communities they serve. We hope that this comparative policy analysis review will provide institutions at both the higher education and P12 levels so that networking opportunities are created, and teacher education programs recruit students with a passion for education.

Acknowledgments

Not applicable.

Authors contributions

Both authors have contributed equally to this study. Both authors have reviewed and approved the final manuscript.

Funding

Not applicable.

Competing interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Redfame Publishing.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not

publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

Open access

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

References

- Articulation agreements. SOM-State of Michigan. (n.d.). https://www.michigan.gov/mde/resources/career-development-resources/postsecondary-credit-agreements
- Bailey, T. R., Jaggars, S. S., & Jenkins, D. (2015). *Redesigning America's community colleges: A clearer path to student success.* Boston, MA: Harvard University Press.
- Bakir, C. (2022). What does comparative policy analysis have to do with structure, institution and agency debate? *Journal of Comparative Policy Analysis*, 24(5), 415-419. https://doi.org/10.1080/13876988.2022.2045867.
- Barnett, E. (2016). Building momentum from high school into college. Boston, MA: Jobs for the Future.
- Barnett, E. A. (2018b). *High school-to-college transition course: A typology of design choices*. New York, NY: Columbia University, Teachers College, Community College Research Center.
- Barnett, E. A., Chavarín, O., & Griffin, S. (2018a). *Math transition courses in context: Preparing students for college success (CCRC Research Brief)*. New York, NY: Columbia University, Teachers College, Community College Research Center.
- Capano, G., & Howlett, M. (2020). The knowns and unknowns of policy instrument analysis: Policy tools and the current research agenda on policy mixes. *SAGE Open, 10*(1), 1-13. https://doi.org/10.1177/ 2F2158244019900568
- Cheng, M. H., & So, W. M. (2012). Analysing teacher professional development through professional dialogue: an investigation into a university–school partnership project on enquiry learning. *Journal of Education for Teaching*, 38(3), 323-341. https://doi.org/10.1080/02607476.2012.668331
- Conley, D. T. (2005). College knowledge: What it really takes for students to succeed and what we can do to get them ready. San Francisco, CA: Jossey-Bass.
- de Wee, G. (2021). Comparative policy analysis and the science of conceptual systems: A candidate pathway to a common variable. *Foundations of Science*, *27*, 287-304. https://doi.org/10.1007/s10699-021-09782-5
- Family and consumer sciences. Ohio Department of Education. (n.d.). https://education.ohio.gov/Topics/Career-Tech/Program-Enhancements/Family-and-Consumer-Sciences
- Grawe, N. D. (2021). How to Survive the Enrollment Bust Colleges face looming demographic challenges. The pandemic offers clues for overcoming them. *The Chronicle of Higher Education*. https://www.chronicle.com/article/how-to-navigate-the-demographic-cliff
- High School Graduate Trends—A Glimpse of the Future before COVID-19 Intervened. Western Interstate Commission for Higher Education. Knocking. (2023, February 27). https://knocking.wiche.edu/report/
- Illinois State Course Catalog. Illinois State Board of Education. (n.d.). https://isbe.net/Pages/Search-Results.aspx?k=Illinois+State+Course+Catalog+2024
- Indiana Department of Education (2023, November 30). *Course titles and descriptions*. DOE. https://www.in.gov/doe/students/indiana-academic-standards/course-titles-and-descriptions/
- Iowa Family & Consumer Sciences. Department of Education. (2024, January 17). https://educate.iowa.gov/higher-ed/cte/iowa-quality/programs-study/service-areas/family-consumer-sciences
- *Kentucky State University: Dual-credit.* Kentucky State University | Dual-Credit. (n.d.). https://www.kysu.edu/academics/dual-credit/index.php
- Klenk, T., Antonowicz, D., Geschwind, L., Pinheiro, R., & Pokorska, A. (2022). Taking women on boards: A comparative analysis of public policies in higher education. *Policy Reviews in Higher Education*, 6(2), 128-152. https://doi.org/10.1080/23322969.2022.2066014

- Levin, B. (2009). Enduring issues in urban education. *Journal of Comparative Policy Analysis*, 11(2), 181-195. https://doi.org/10.1080/13876980902888020.
- Missouri Department of Elementary and Secondary Education. Search Results | Missouri Department of Elementary and Secondary Education. (n.d.). Search Results | Missouri Department of Elementary and Secondary Education (mo.gov)
- Regional career pathways. Wisconsin Department of Public Instruction. (2023, July 20). https://dpi.wi.gov/pathways-wisconsin
- Stone, J. R. (2017). Introduction to pathways to a productive adulthood: The role of CTE in the American high school. *Peabody Journal of Education*, 92(2), 155-165. https://doi.org/10.1080/0161956X.2017.1302207
- Trimble, A., Imler, A., Carr, C., & Scheffler J. M. (2021). 488 career awareness of incoming University of Florida animal science majors. *Journal of Animal Sciences*, 99(3), 215. https://doi.org/10.1093/jas/skab235.391
- Wiggan, G., Smith, D., & Watson-Vandiver, M. J. (2021). The national teacher shortage, urban education and the cognitive sociology of labor. *The Urban Review, 53*, 43-75. https://doi.org/10.1007/s11256-020-00565-z