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NOTES FROM THE EDITOR

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It would not be possible to publish a refereed journal such as the *Journal of Career and Technical Education* without a distinguished group of reviewers. I would like to take this opportunity to acknowledge and thank the following colleagues for giving their time and expertise in providing timely reviews of manuscripts.

Thomas R. Dobbins, Clemson University
Editor

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The *Journal of Career and Technical Education (JCTE)* is a non-profit, refereed, national publication of Omicron Tau Theta, the national, graduate honorary society of career and technical education. Manuscripts submitted for consideration by *JCTE* should focus on career and technical education philosophy, theory, or practice. Comprehensive reviews of literature and reports of research and methodology will be considered. All articles should relate to current issues and have direct implications for career and technical educators. It is intended that *JCTE* serve as a forum for discussion of philosophy, theory, practice, and issues in career and technical education. Manuscripts submitted for review should not have been published or be under current consideration for publication by other journals.

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The *Publication Manual of the American Psychological Association (*APA*)*, 5th Edition (2001), is the standard of style for *JCTE*. Place figures and tables in the appropriate place in the manuscript. Underlining should not be used anywhere in the manuscript. Statistics and titles in the reference list should be italicized according to APA 5th Edition Style. Manuscripts not adhering to the style manual will be returned to the authors without review.

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Manuscripts accepted for publication normally may not exceed 20 pages of printed, double spaced text, including title page, abstract page, tables, figures, and references. Margins should be 1" all around and use Times New Roman 12-point for all text, tables, and figures. Use the line numbering feature of the word processor to number each line of the manuscript.

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The manuscript and title page can be submitted via e-mail to tdbbns@clemson.edu, or it can be mailed on a 3.5" diskette or CD to Dr. Thomas Dobbins at the address on page 1. Diskettes become the property of *JCTE* and will not be returned. The electronic files must be in Microsoft Word format. The use of Rich Text Format (rtf) is acceptable.

Review and Publication

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> 1. **Accept** (publish as submitted, very minor editorial revisions may be needed - this is very rare for initial submissions);
> 2. **Accept Conditionally**, with minor revisions (revisions are reviewed by editor, not resubmitted to review panel);
> 3. **Accept Conditionally with Major Revisions** (revised manuscript will be sent back to the same reviewers for reconsideration);
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The manuscript review process for *JCTE* is a "double-blind" peer review in that the reviewers are not informed of the identity of the author(s) and the author(s) are not informed of the identities of the reviewers. The reviewers of the manuscript are recognized scholars with appropriate professional and educational preparation and are selected for their specific expertise relative to the topic of the manuscript being reviewed. At least one of four reviewers on each manuscript must be a member of the *JCTE* Editorial Board. The final acceptance rate for *JCTE* is usually 35-45%. Authors who persevere through requested revisions are generally the authors whose manuscripts are eventually published in selective, refereed journals such as *JCTE*.

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Book reviews will also be considered for publication in the *JCTE*. Persons interested in publication of a book review should contact the Editor-Elect (see inside front cover, page 1). A thematic issue of the *JCTE* may be published at least once every two years. Themes for upcoming issues will be announced in both the hard copy and electronic journal.

Animal Science Experts' Opinions on the Non-Technical Skills Secondary Agricultural Education Graduates Need for Employment in the Animal Science Industry: A Delphi Study

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ABSTRACT

Non-technical, employability skills are in high demand for entry-level job-seekers. As such, this study sought to describe the perceptions of Oklahoma's animal science industry leaders as it related to the employability skills needed for entry-level employment of high school graduates who had completed coursework in Oklahoma's Agricultural, Food and Natural Resources, animal systems pathway. In all, 33 non-technical statements describing skills which students need to be employable were generated from the panel of experts. All 33 reached consensus in Round Two of the study. Panelists agreed unanimously that being honest was the most important non-technical skill for a potential employee to possess. Because all 33 skills reached agreement, it is recommended that secondary agricultural education instructors integrate all 33 into their existing curriculum whenever appropriate to increase human capital holding value related to the entry-level employment of high school graduates.

Introduction/Theoretical Framework

Workers in the 21st century need skills such as problem-solving and analytic, decision-making, organization and time management, risk-taking, and communication (Evers, Rush, & Berdrow, 1998; Lynch, 2000; Robinson, Garton, & Vaughn, 2007) to be employable in the workforce. Lynch (2000) posited ". . . there is a tremendous demand for educated people with general employability and specialized technical skills . . ." (p. 4). Therefore, a need exists to determine what types of skill sets are demanded of secondary high school graduates by industry because there is a "general consensus that occupational preparation . . . should begin sometime in high school" (p. 7).

Several studies have examined career and technical education (CTE) and its role in the employment of U.S. citizens (Conroy, 1998; Lynch, 2000; Martinez Jr., 2007; Rojewski, 2002). Conroy's (1998) study related to how adolescent males and females chose to enroll in CTE programs according to their future career aspirations. Forty-one percent of participants intended to pursue professional careers after high school graduation. However, the participants did not intend to pursue post-secondary education and assumed they would receive lower job positions versus individuals who had obtained some post-secondary education. Based on these findings, Conroy (1998) suggested that CTE courses be "integrated into the total education program, and provide a broad-based exposure to the world of work through experiential learning" (p. 9). Lynch (2000) reaffirmed the concepts of integrating CTE into the overall education curriculum by

stating that "career and technical education is integral to whole school, comprehensive reform; it is not separate from it" (p. 8).

Researchers have suggested that the future of CTE should be flexible enough to prepare students for both industry and college simultaneously (Lynch; Roberts & Ball, 2009). This suggestion exists because employability skills, such as work ethics and decision making, are important for students who plan to attend post-secondary education institutions (Conroy) as well as those who have a desire to enter the workforce immediately on graduation (Roberts & Ball).

One area of CTE is agricultural education. Specifically, Oklahoma's agricultural education programs served over 26,000 students in 2007 (Oklahoma Agricultural Education Division, 2007). Approximately, 55% of these students were projected to enroll in college after graduating from high school (Oklahoma Agricultural Education Division). The remaining 45% of Oklahoma's agricultural education high school graduates were projected to enlist into the military service, enter the workforce, or be unemployed (Oklahoma Agricultural Education Division). Therefore, obtaining valuable skill sets needed to be employable and for successful citizenship is imperative for these graduates as well as society.

Czaja (2006) reported that as soon as "2010, the number of workers aged 55+ will be at about 26 million . . ." (p. 283). This increase in retirees will create areas of employment in top level positions among all industries (Carnevale, 2003), thus, requiring highly skilled employees to emerge in the workplace. Although employment opportunities will be available, the question remains whether viable employees will be available to fill these positions. Czaja found "at the same time that the work force is aging there is also a slowed growth in the number of younger workers and slowing in the growth of the labor supply" (p. 283). So, it could be hypothesized that this will create an opportunity for willing and able high school graduates to fill needed positions of employment if they possess the desired skill sets employers need.

Robinson (2000) found that "most discussions concerning today's workforce eventually turn to employability skills," which are seen as "basic skills" that aid individuals in "getting, keeping, and doing well on a job" (p. 1). These skills can be, but are not limited to, reliability, responsibility, problem-solving, and social competencies (Robinson). Overtoom (2000) defined employability skills as "transferable core skill groups that represent essential functional and enabling knowledge, skills, and attitudes required by the 21st century" (p. 1). Overtoom suggested that employability skills are necessary for success in the job market regardless of the employee's chosen career path, employment level, or educational background.

Czaja and Ascher (1988) asserted that employers will focus more on previous work experience than academic accomplishments. Additionally, employees need to be capable of learning on the job and using a cognitive style of skills, which will include handling success and failure on the job and recovering from the resulting outcomes (Carnevale, 2003). Employers will demand future employees have problem-solving and behavioral skills (Ascher, 1988; Carnevale) as well as the ability to work in teams and perform under increased human interaction scenarios between employees and consumers (Carnevale).

In a study of 1000 job advertisements by Bennett (2002), it was revealed that the entry-level skills needed for marketing positions focused on IT and presentation. Management positions required skills involving motivation and communication. Finance positions required analytical, numeracy skills. And, Human Resource Management positions sought communication skills. Yet, employers have been most hesitant to hire young, inexperienced workers (Krahn, Lowe, & Lehmann, 2002) because of factors such as poor grades, attitudes, motivation levels, preparation, and basic skills, such as oral and written communication, to name a few (Charner, 1988). Therefore, the question remains, where will employees be able to acquire such skills for future employment? Public school systems could be a viable source for meeting employers' demands.

The need to improve the employability skills of the workforce has been an issue across all phases of education. Steps have been taken to define and address key skill areas needed for improvement, specifically at the secondary level. In 1991, the Secretary's Commission on Achieving Necessary Skills (SCANS) report was initiated to define the skills needed by high school graduates in the workforce. The focus of the report was to determine how high schools could best mirror industry in an effort to make the transition from school-to-work less difficult for secondary school graduates. In addition to aiding an easier transition for graduates, unemployment was also a concern. The report highlighted the need for students to learn basic skills such as math, oral communication, and written communication; thinking skills such as problem solving, decision making, and lifelong learning; and foundational skills such as responsibility, integrity, and confidence. A related document from SCANS (1992), titled "Learning a Living," suggested the best way to ensure K-12 students have acquired said skills is for teachers to teach "in context" by linking the skills needed in industry to specific objectives within the curriculum (para. Reinventing K-12 Education).

The theoretical framework for this study was based on the human capital theory. In its simplest form, human capital can be viewed as an investment in education and training (Becker, 1964). When analyzed, "it is *human* because it is embodied in man, and it is *capital* because it is a source of future satisfactions, or of future earnings, or both" (Shultz, 1971, p. 48). It is often argued whether human capital is limited to reading and writing or specialization within a given industry. Nevertheless, investing in an individual's knowledge of any given field will result in that person becoming a more productive asset in society.

Purpose of the Study

The purpose of this study was to describe the perceptions of Oklahoma's animal science industry leaders as it related to the employability skills needed for entry-level employment of high school graduates who had completed coursework in Oklahoma's Agricultural, Food and Natural Resources, animal systems pathway. Specifically, the animal science career pathway is one of seven offered in Oklahoma secondary agricultural education programs. The purpose of the pathways is to provide secondary students an opportunity to specialize in one area of agriculture and develop skill sets needed for employment in that industry. Courses in the animal systems career pathway include units and topics on basic introductory animal science, nutrition, reproduction, and equine science.

Research Objective

The research objective of this study was to identify the non-technical competencies deemed necessary for entry-level employment of high school graduates in the animal science industry after completing coursework successfully in the animal systems career pathway, as determined by consensus of an expert panel of animal science industry leaders in Oklahoma.

Population and Sample

The population for this study was Oklahoma's animal science industry experts from nine areas of specialization: beef cattle; dairy; equine; goat; implements/miscellaneous; poultry; sheep; swine; and veterinarians. Stitt-Gohdes and Crews (2002) stated that "careful selection of the panel of experts is the keystone to a successful Delphi study" (p. 60). Moreover, Wicklein (1993) asserted that it is important to have a strong set of criteria when selecting a panel "because the success of the Delphi Technique relies upon the use of informed opinion" (p. 57). Therefore, panel members were selected using a purposive sampling technique, which "is the process of selecting a sample that is believed to be representative of a given population" (Gay, Mills, & Airasian, 2006, p. 113).

A sample ($n = 42$) was obtained for the study. The criterion used for selecting individuals was based on their prior experience and knowledge of the industry as it pertained to employment, including the hiring of entry-level employees. Only those individuals who had previously hired or would consider hiring high school graduates were considered for this study. Additionally, all experts who served on the panel were affiliated with the animal science industry in Oklahoma. Finally, due to the nature of the data collection process, only those individuals who had access to the Internet and could respond to the questionnaire via electronic mail (e-mail) were considered as panel members.

An animal science professor at Oklahoma State University consulted with departmental colleagues to determine possible experts who should be included in the study. Following the initial collection of potential panel members, remaining committee members reviewed the list and made further additions. Panel members were then contacted via e-mail or telephone to determine their willingness to participate in the study.

Turoff and Linstone (2000) stated that a computer version of the Delphi technique "has the advantage of eliminating the delay caused in summarizing each round of Delphi . . ." (p. 5). Also, the heterogeneity of the panel members is protected and higher validity of the data results when utilizing an electronic questionnaire (Turoff & Linstone). Panel members who expressed a desire to participate were sent a consent form via e-mail. Their replies to the e-mail were considered as panelists' consent to participate in the study.

Dalkey (1969) stated that when a Delphi group is larger than 13 members, a reliability of at least .80 can be achieved. Of the 42 participants selected to participate, 32 responded in Round One. This produced a response rate of 76.2%. In Round Two, 26 participants responded for a 61.9% response rate. The data collection period terminated after Round Two due to panelists reaching consensus of agreement on all the items generated in Round One. Based on Dalkey

(1969), within both rounds of the Delphi, reliability was maintained due to the level of responses surpassing the minimum of 13.

Data Collection

Round One consisted of collecting data related to the following open-ended stem:

Please list all the non-technical, employability skills (e.g., strong work ethic, punctuality, ability to communicate, etc.) you believe a high school agricultural education graduate should have to obtain entry-level employment in your area of the animal science sector.

The responses generated from Round One were transcribed into a Microsoft Word document and categorized by the researchers into common themes. Three researchers independently coded the statements into themes and then negotiated consensus regarding the appropriate categorization i.e., the emergent themes (Montgomery & Crittenden, 1977). Categories presented by Evers et al. (1998) were used as a framework to assist in creating and categorizing competencies originated by the panel. As such, statements generated from the panel members were grouped into six themes: Communication; Decision Making; Lifelong Learning; Personal Organization and Time Management; Personal Strengths; and Problem Solving.

Following the categorization of Round One responses, Round Two questions were developed in Microsoft WORD and transcribed into the WS FTP 95 software program. A total of 33 non-technical statements were generated for the Round Two questionnaire. The Round Two questionnaire asked participants to rank statements using a 4-point summated-rating scale: ("1" = "Strongly Disagree"; "2" = "Disagree"; "3" = "Agree"; "4" = "Strongly Agree").

Because panelists reached agreement in Round Two on all items generated in Round One, the data collection period was terminated thereafter. So, no items were re-submitted to the panelists for further review.

Findings

The statement "be honest" ($M = 4.0$; $SD = 0.00$) was the sole competency that received unanimous agreement from the panel (Table 1). Moreover, the following statements received a mean score above 3.70: "demonstrate a strong work ethic" ($M = 3.96$; $SD = .20$), "maintain a positive attitude" ($M = 3.77$; $SD = 0.43$), "gain trust of employer" ($M = 3.77$; SD = 0.43), "display a desire to learn new skills/information" ($M = 3.77$; $SD = 0.43$), "function as a team member" ($M = 3.77$; SD = 0.43), "adhere to deadlines" ($M = 3.73$; $SD = 0.45$), "acquire new knowledge on-the-job efficiently" ($M = 3.73$; $SD = 0.45$), and "respond verbally to customers, co-workers, and supervisors appropriately" ($M = 3.73$; $SD = 0.45$). Twenty non-technical competency statements received mean ratings ranging from 3.69 to 3.50 (Table 1). The top four skills provided by the panelists were "foundational" SCANS skills and represented the decision making and problem solving theme areas.

In addition, four statements received mean scores ranging from 3.42 to 3.38. Those statements were "apply knowledge gained through past work experience(s) to future task(s)" (*M*

= 3.42; *SD* = 0.50), "recognize the needs of co-workers and supervisors" (*M* = 3.42; *SD* = 0.50), "practice strong public relation skills" (*M* = 3.38; *SD* = 0.57), and "correspond in writing to customers, co-workers, and supervisors appropriately" (*M* = 3.38; *SD* = 0.57).

Table 1

Agreement Levels for Entry-level Non-technical Skills Needed in the Animal Science Sector According to Animal Science Experts per Round Two of the Delphi Procedure (N = 26)

	Statement	Topic Theme[a]	SCANS Skill[b]	*M*	*SD*	% of Agreement (3 or 4)
1.	Be honest	DM	F	4.00	0.00	100.00
2.	Demonstrate a strong work ethic (e.g., responsible, accountable, dependable)	PS	F	3.96	0.20	100.00
3.	Maintain a positive attitude	PS	F	3.77	0.43	100.00
4.	Gain trust of employer	DM	F	3.77	0.43	100.00
5.	Display a desire to learn new skills/information	LL	T	3.77	0.43	100.00
6.	Function as a team member	Comm	B	3.77	0.43	100.00
7.	Adhere to deadlines (e.g., accomplish tasks on time)	POTM	F	3.73	0.45	100.00
8.	Acquire new knowledge on-the-job efficiently	LL	T	3.73	0.45	100.00
9.	Respond verbally to customers, co-workers, and supervisors appropriately	Comm	B	3.73	0.45	100.00
10.	Motivated to perform at an optimal level	PS	F	3.69	0.47	100.00

Table 1 (continued).

Statement	Topic Theme[a]	SCANS Skill[b]	*M*	*SD*	% of Agreement (3 or 4)
11. Realize the success of the enterprise	DM	T	3.69	0.47	100.00
12. Follow instructions	Comm	B	3.69	0.47	100.00
13. Be attentive	Comm	B	3.69	0.47	100.00
14. Demonstrate punctuality (e.g., arrive on time for work/meetings)	POTM	F	3.69	0.84	100.00
15. Perform tasks independently	PS	F	3.65	0.49	100.00
16. Display passion for the job being performed	PS	F	3.65	0.49	100.00
17. Demonstrate a desire to progress forward in his or her career	LL	T	3.65	0.49	100.00
18. Understand ethical implications of decisions made	DM	T	3.62	0.50	100.00
19. Respond positively to constructive criticism	PS	F	3.58	0.50	100.00
20. Identify problems	Pr Solv	T	3.58	0.50	100.00
21. Recognize possible solutions to problems	Pr Solv	T	3.58	0.50	100.00
22. Apply best solutions	Pr Solv	T	3.58	0.50	100.00
23. Maintain attention to detail	POTM	F	3.58	0.86	100.00
24. Utilize resources to overcome personal weaknesses	PS	F	3.54	0.51	100.00

Table 1 (continued).

Statement	Topic Theme[a]	SCANS Skill[b]	M	SD	% of Agreement (3 or 4)
25. Listen to the views of fellow co-workers and supervisors	Comm	B	3.54	0.51	100.00
26. Practice efficiency while on the job	POTM	F	3.54	0.86	100.00
27. Demonstrate leadership attributes	PS	F	3.50	0.51	100.00
28. Exhibit a professional appearance (e.g., appropriate attire, physical appearance, personal hygiene)	PS	F	3.50	0.51	100.00
29. Maintain organization of task/work responsibilities	POTM	F	3.50	0.86	100.00
30. Apply knowledge gained through past work experience(s) to future task(s)	LL	T	3.42	0.50	100.00
31. Recognize the needs of co-workers and supervisors	Comm	B	3.42	0.50	100.00
32. Practice strong public relations skills	Comm	B	3.38	0.57	96.15
33. Correspond in writing to customers, co-workers, and supervisors appropriately	Comm	B	3.38	0.57	96.15

Note. 1 = Strongly Disagree; 2 = Disagree; 3 = Agree; 4 = Strongly Agree
[a]DM = Decision Making; Comm = Communication; LL = Lifelong Learning; POTM = Personal Organization and Time Management; Pr Solv = Problem Solving; PS = Personal Strengths;

[b]B = Basic; F = Foundational; T = Thinking

Conclusions

The purpose of this study was to describe the perceptions of Oklahoma's animal science industry leaders as it related to the employability skills needed for entry-level employment of high school graduates who had completed coursework in Agricultural, Food and Natural Resources, animal systems pathway. In all, 33 non-technical skills were generated from the panel of animal science industry experts.

Because 100% consensus on the employability skills was reached in Round Two of this Delphi study, i.e., all experts indicated "agree" or "strongly agree," it can be concluded that the expert panelists were in agreement with the non-technical competencies they had generated in Round One of the study. Moreover, panelists "strongly agreed" with 29 of the 33 non-technical competencies that emerged in Round One reinforcing further the importance of non-technical competencies in the workforce, which resonates with the findings of previous researchers (Evers et al., 1998; Lynch, 2000; Overtoom, 2000; Robinson, 2000; Robinson et al., 2007).

In all, when using the SCANS (1991) report as a framework, this study yielded 16 foundational skills, nine thinking skills, and eight basic skills students need to be employable. The theme area "Personal Strengths" contained the most accepted statements as identified by the panelists. Statements in this category included skills such as "strong work ethic," "maintain a positive attitude," and "motivated to perform at an optimal level." The importance of these skills is supported by Robinson (2000) who verified that employees will need skills such as reliability, responsibility, problem-solving, and social skills to perform efficiently in a job setting. Panel members unanimously agreed that being honest was the most important non-technical skill for a potential employee to possess. This finding is in concert with research on college graduates by Graham (2001) and Alston, Cromartie, Wakefield, and English (2009) who found that the character trait "honesty" was extremely important to employers when hiring graduates for the workforce. This finding serves as one of the foundational skills (i.e., responsibility, integrity, and confidence) noted in the SCANS (1991) report.

Recommendations for Practice

The study's expert panelists were in unanimous agreement about the importance of 31 of 33 non-technical skills (Table 1) vis-à-vis entry-level employment of a high school graduate. So, it is important that secondary agricultural education instructors integrate these competencies into their curriculum where appropriate to increase the human capital (Becker, 1964; Schultz, 1971) of their program's graduates on entering the workforce. Specifically, secondary agricultural education instructors should model related behaviors to students enrolled in animal systems pathway courses. *Honesty*, in particular, should be modeled because it received unanimous agreement (i.e., "strongly agree") among the experts. Moreover, employers seek out employees with general employability skills, including honesty and integrity (Lynch, 2000). Curriculum materials, such as case studies involving animal science issues, should be integrated in which students must employ honesty and integrity when making decisions and solving problems related to class activities and assignments.

Recommendations for Future Research

Although this study was limited to a panel of experts in animal science in Oklahoma, it would be important to include students and teachers in future studies. This inclusion would allow for a form of "triangulation" as perceptions of necessary employability skills from both groups could be telling. Future studies should enable agricultural education teachers to rank animal systems pathway graduates on their performance of the skills generated from this study and employers to rank graduates on their level of performance after completing their first year in the animal industry successfully. Subsequently, "gaps" or incongruencies that emerge could serve as rationale for new curriculum resources to use in courses comprising the animal systems pathway, as well as inservice and professional development topics for agricultural education instructors.

Implications and Discussion

As defined by this Oklahoma's Agricultural Education Division (2007), clustering similar occupations, such as animal systems, with outlined curriculum increases the likelihood that students learn competencies necessary for success in college and the workplace. This implication is supported by the human capital theory. As stated by Shultz (1961), one of the best ways to improve human capital is through "formally organized education at the elementary, secondary and higher levels . . ." (p. 9). Improving the non-technical competencies acquired in the animal systems pathway in Oklahoma stands to enhance students' probability of gaining entry-level employment and their job success thereafter.

Because every non-technical competency statement generated by the panel of experts reached consensus of agreement, it can be implied that these skills are held in great demand by employers in the animal industry. The findings of this study seem to indicate that employers desire to hire graduates who have adequate non-technical competencies before entering the workforce. This implication is consistent with research by other scholars (Evers et al., 1998; Lynch, 2000; Robinson et al., 2007), who concluded that workers in the 21st century will need to possess non-technical skills to enter and succeed in the workforce. Based on the non-technical competency statements supported by panelists in this Delphi study, it could be surmised that honesty is an issue regarding the job performance of their employees. The statement "be honest" received the highest mean rating ($M = 4.00$) from panelists per Round Two. Therefore, secondary agricultural education instructors should teach and model honesty at all times and in all aspects of the secondary agricultural education program.

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A Framework for the Preparation of Accomplished Career and Technical Education Teachers

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ABSTRACT

Reforms in teacher preparation continue to spark national interest. In a statewide reform effort to improve teacher quality in Georgia, the State Department of Education, Board of Regents, and Professional Standards Commission have all adopted the Georgia Framework for Accomplished Teaching (Georgia Department of Education, 2003.). The Georgia Systemic Teacher Education Program (GSTEP, n.d.) developed this framework with a grant funded by the U.S. Department of Education. The Georgia Framework provides a description of accomplished teaching using six broad categories of teaching skills and abilities: curriculum and content, knowledge of students and their learning, learning environments, assessment, planning and instruction, and professionalism. This qualitative study focused on a Career and Technical Education (CTE) preservice teacher education program that has been structured around the Georgia Framework. Student teachers provided in-depth reflections on their skills and abilities in the six broad areas described in the Framework. Findings support use of the Georgia Framework for Accomplished Teaching in CTE teacher preparation. Students felt most prepared in the areas of curriculum and content, knowledge of students and their learning, planning and instruction, and professionalism. Students felt less prepared in the areas of learning environments and assessment.

Introduction

Calls for improvement in teacher quality have led to reform initiatives in teacher education. A variety of reports and organizations have classified teaching standards identifying what teachers should know and be able to accomplish. In 1986, the Carnegie Task Force on Teaching as a Profession released its response to *A Nation at Risk* (National Commission on Excellence in Education), a report distributed to congress in 1983. Its response, compiled in *A Nation Prepared: Teachers for the 21st Century*, identified teaching standards and has been instrumental in defining and initiating teacher education reform efforts. Another report released in 1986, *Tomorrow's Teachers* (Holmes Group, 1986) called for similar types of reform efforts. Two governing boards overseeing beginning and advanced teacher certification standards were established in 1987: (a) Interstate New Teacher Assessment and Support Consortium (INTASC) (Council of Chief State School Officers, n.d.) and (b) National Board for Professional Teaching Standards (NBPTS, n.d.). The No Child Left Behind Act of 2001 (P.L. 107-110) (U.S. Department of Education [USDOE], 2004) signed into law by President Busch on January 8, 2002 also calls for strengthening of teaching standards and teacher quality.

Reform in teacher preparation is occurring nationally. In a statewide reform effort to improve teacher quality in Georgia, the State Department of Education, Board of Regents, and Professional Standards Commission have all adopted the Georgia Framework for Accomplished Teaching, a framework originally developed by the Georgia Systemic Teacher Education Program (GSTEP, n.d.). GSTEP was funded with a U.S. Department of Education grant and

consisted of a consortium including The University of Georgia, Valdosta State University, Albany State University, six school districts within Georgia, and other partners throughout the state. GSTEP focused its research on four broad areas important to effective teaching: (a) curriculum, (b) induction, (c) early community and school-based experiences, and (d) program evaluation. The consortium developed a collection of guiding principles for effective teaching and a framework that includes a list of standards and indicators. "The GSTEP Framework for Accomplished Teaching is a replicable statewide induction tool that identifies the knowledge, skills, dispositions, understandings, and other attributes of accomplished teaching. It provides a structure through which novices and their mentors are able to assess and analyze teaching practice," (GSTEP). Consortium members used the framework differently tailoring its components to fit the needs of their preservice teachers and certification standards.

The Georgia Framework for Accomplished Teaching (Georgia Department of Education [GADOE], 2003.) provides a description of accomplished teaching standards using six broad categories of teaching skills and abilities: (a) curriculum and content, (b) knowledge of students and their learning, (c) learning environments, (d) assessment, (e) planning and instruction, and (f) professionalism. The Framework is provided in Table 1.

Table 1
Georgia Framework of Accomplished Teaching

Content and Curriculum - Teachers demonstrate a strong knowledge of content area(s) appropriate for their certification levels.
1. Demonstrate knowledge of content.
2. Understand how to teach their subjects.
3. Stay current in their subject areas.
4. Select and use a wide variety of resources.
5. Interpret and construct school curriculum reflecting standards.

Knowledge of Students and Their Learning - Teachers support the intellectual, social, physical, and personal development of all students.
1. Believe that all children can learn at high levels and hold high expectations for all.
2. Understand how learning occurs in general and in the content areas.
3. Be sensitive, alert, and responsive to all aspects of a child's well-being.
4. Understand how factors in environments may influence students' lives and learning.
5. Be informed about and adapt their work based on students' diverse needs.
6. Establish respectful, productive, and cooperative relationships with families.

Learning Environments - Teachers create learning environments that encourage positive social interaction, active engagement in learning, and self-motivation.
1. Create a learning community for students.
2. Organize, allocate, and manage time, space activities, technology and other resources.
3. Understand and implement effective classroom management.
4. Recognize the value of and use of knowledge about human motivation and behavior.
5. Sustain a culturally responsive classroom.
6. Access resources in order to foster students' learning and well-being.

7. Use effective communication techniques to foster interaction in the classroom.

Assessment - Teachers understand and use a range of formal and informal assessment strategies to evaluate and ensure the continuous development of all learners.
   1. Understand measurement theory and types of assessment.
   2. Use preassessment data to select or design appropriate student learning goals.
   3. Choose, develop, and use classroom-based assessment methods.
   4. Involve learners in self-assessment.
   5. Develop and use valid, equitable grading procedures based on student learning.
   6. Use assessment data to communicate student progress.
   7. Keep accurate and up-to-date records of student work, behavior, and accomplishments.
   8. Use assessment to identify student strengths and needs and promote student growth.

Planning and Instruction - Teachers design and create instructional experiences based on their knowledge of content and curriculum, students, learning environments, and assessment.
   1. Articulate rationales for choices of curriculum and instructional strategies.
   2. Plan and carry out instruction.
   3. Understand and use a variety of instructional strategies.
   4. Monitor and adjust strategies in response to learner feedback.
   5. Vary their roles in the instructional process.
   6. Use appropriate resources, materials, and technology to enhance instruction.
   7. Value and engage in planning as a collegial activity.

Professionalism - Teachers recognize, participate in, and contribute to teaching as a profession.
   1. Continually examine and extend their knowledge.
   2. Implement laws related to rights and responsibilities of students, educators, and families.
   3. Follow established codes of professional conduct, including school district policies.
   4. Reflect on teaching and learning to improve their practice.
   5. Seek opportunities to learn based upon reflection, input from others, and career goals.
   6. Advocate for the diverse needs and high expectations of all students.
   7. Assume leadership and support roles as part of a school team.

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One department specializing in career and technical education (CTE) was an active participant in the GSTEP consortium. There are numerous motives in today's society for continually developing and enhancing the skills and knowledge of CTE teachers. Some of the most relevant reasons include rapid changes in technology and the workplace, establishment of higher academic standards, and growing diversity of the student population. Preservice and inservice CTE teachers require varied and ongoing opportunities for professional growth.

The CTE department (with the guidance and assistance of an advisory council made up of practicing CTE teachers and administrators) reconceptualized its preservice teacher education program. Skills and abilities described by the Georgia Framework (GADOE, 2003.) were integrated into the structure, delivery, and evaluation of students' educational experiences in six preservice CTE courses: (a) early practicum I, (b) practicum II, (c) foundations of CTE, (d)

curriculum development in CTE, (e) instructional strategies in CTE, and (f) student teaching. A summary of the CTE project accomplishments since its inception in 2001 are identified below:

1. Development of a sustained and active advisory council that partnered university CTE faculty with public school CTE administrators and teachers.
2. Alignment of CTE preservice education courses with INTASC, NBTS, Georgia Framework, and area specific Praxis and state administered teacher examinations.
3. Redesign of CTE preservice education courses around the Georgia Framework.
4. Development and maintenance of a mentor/supervising CTE teacher database.
5. Extensive review, evaluation, and revision of comprehensive beginning and advanced experiential activities and experiences for CTE preservice teachers.
6. Development and use of an online CTE preservice practicum and student teacher handbook and guide designed for student teachers, university supervisors, and cooperating teachers (see: http://www.coe.uga.edu/welsf/wfed/students/handbook/intro.html)
7. Use of an online discussion board to solicit and encourage weekly communication and reflection (guided by the Georgia Framework) among CTE preservice teachers.
8. Development and use of classroom video tapping activities providing opportunities for feedback, reflection, and improvement of CTE preservice teacher performance.
9. Development and use of an early clinical/practicum activities/experiences portfolio structured around the Georgia Framework.
10. Development and use of CTE professional portfolio structured around the Georgia Framework.
11. Development and delivery of a preservice CTE teacher conference and monthly seminars for practicum students and student teachers.
12. Development and delivery of cooperating teacher seminars and workshops.
13. Organization and delivery of a Beginning CTE Teachers Panel held annually during a regional conference.

Conceptual Framework

Reports on education that surfaced in the 1980s and recent teacher preparation reform efforts have encouraged researchers to examine what is meant by effective teaching. 'Effective teaching,' as a concept provides direction for the overall educational process and is frequently discussed in research literature on teaching and learning (Biggs, Hinton, & Duncan, 1996; Council of Chief State School Officers, n.d; Carnegie Task Force on Teaching as a Profession, 1986; GSTEP, n.d.; Gregson, 1993; Griggs & Burnham, 1988; Holmes Group, 1986; Lynch, 1996; Lynch, 1997; Milanovich, 1986; Naylor, 1997; NBPTS, 2001; and USDOE, 2004). Several questions are often pondered: (a) what is effective (accomplished) teaching; (b) what do effective (accomplished) teachers know; and (c) what should effective (accomplished) teachers be able to accomplish? The movement, to identify and clarify effective or accomplished teaching has led to national and state standards for accomplished teaching.

Leading education professionals, such a Hunter (1994) and Danielson (1996) have developed models and frameworks to identify the knowledge, skills, behaviors, and dispositions of effective teachers. According to Danielson, "A framework for professional practice offers the

profession a means of communicating about excellence." Danielson also asserted that, "A uniform framework allows those conversations to guide novices as well as to enhance the performance of veterans" (p. 6). Understanding what is expected of an effective teacher (i.e. what teachers are expected to do and how they are expected to perform in their classrooms) has the potential "for affecting and effecting students' achievement" (Hunter, p.6). In teacher education, frameworks have successfully described the professional teacher's responsibilities, promoted preservice teacher learning, and have been documented through empirical studies and theoretical research (Danielson).

Frameworks, like the one posed by the Georgia Framework for Accomplished Teaching, can be used to establish a common language among professionals, structure expert-type definitions, and certification procedures for novice and advanced practitioners (Danielson, 1996; Iverson, Lewis, & Talbot, 2008). In this study, the Georgia Framework for Accomplished (GADOE, 2003) teaching is used to explore how accomplished or effective CTE preservice teachers feel following their capstone student teaching block. In literature published by GSTEP (n.d.) and NBPTS (2001), 'effective teaching' has been replaced by 'accomplished teaching.'

Purpose

The purpose of this qualitative study was to discover how preservice teachers in career and technical education conceptualize their preservice teacher education experience and preparation after completing their professional core of courses and student teaching. The Georgia Framework for Accomplished Teaching (GADOE, 2003) was used as the impetus to guide and focus students' thinking and reflective thought regarding six broad categories of accomplished or effective teaching: (a) content and curriculum, (b) knowledge of students and their learning, (c) learning environments, (d) assessment, (e) planning and instruction, and (f) professionalism. This type of qualitative introspection and examination uncovered both strengths and weaknesses present in the CTE preservice teacher education program. Qualitative insight into preservice teachers' reflections regarding how accomplished or effective they believed they were when examining their own teaching related skills and abilities will be instrumental in aiding teacher educators in developing and structuring teacher education programs that best fit the needs of today's CTE teachers. It will guide teacher educators in their efforts to create necessary reforms in CTE teacher preparation.

Research Questions

The questions addressed by this qualitative study sought to discover how accomplished or effective preservice teachers felt regarding their teaching skills and abilities following their professional core of courses and student teaching experience. This study attempted to answer two questions:

1. Are preservice CTE teachers prepared to become accomplished teachers?
2. Is the Georgia Framework for Accomplished Teaching an appropriate model to use when preparing CTE teachers?

Procedures

Participants

Since 2001, through active participation in the GSTEP initiative, the preservice teacher education program in the researcher's institution has been extensively revised to provide for a more contextual teaching and learning approach to preparation. This type of preservice model offered opportunities for experiential leaning and reflective practice. It integrated theory and practice with application and provided preservice CTE teachers with the capacity to use what they had learned. During the process, an advisory council consisting of university faculty, secondary career and technical education faculty, and administrators conducted a comprehensive reconceptualization and redevelopment of the program's preservice model of CTE teacher preparation.

This study analyzed reflections from 60 of 67 student teachers who returned their Georgia Framework for Accomplished Teaching reflections from the fall 2004 and spring 2005 semesters. These students were the first groups to complete their entire preservice CTE teacher preparation under the Georgia initiative and transformations. They were active participants in the accomplishments previously listed. The reflections included students' perceptions of how well the teacher education program had prepared them for their student teaching experience. Reflections focused on the six categories of accomplished teaching described by the GSTEP Framework (see Table 1). Students were provided written and oral directions regarding the completion of their reflections. Additional clarifications, when requested, were handled on an individual student basis either orally or through email communications.

Methods

The research method was used to examine student teacher's reflections as a path to understanding how student teachers incorporated classroom theory into their student teaching practice. This is consistent with Haman's view that "reflective teaching is a desired goal of many teacher education programs (2002, p. 3) and with Smyth's (1989) general definition of reflection as an active rather than contemplative form of reflective practice that is useful in teacher education. Baker and Shahid (2003, p.2) also noted that "reflections can be the catalyst that enables students to synthesize new understandings from the collision of theory and real-life events in classrooms." Chitpin, Simon, and Galipeau (2008) noted that employing reflective practices can contribute to the overall professional development of preservice teachers.

A computer aided qualitative data analysis software program, NVivo was used as a cognitive tool for managing, coding, and comparing data across the 60 document sets. The use of qualitative data analysis software (QDA) has increased, especially with larger sets of data, as researchers find that data can be managed more effectively and that emerging themes can be discovered and compared creatively across larger data sets with relative ease (Gilbert, 2000). Following the computer coding of the data, students' quotes were manually evaluated and categorized into one of the six broad Framework areas. CTE advisory council members grouped quotes individually and then collectively. Quotes were grouped according to various themes that emerged within the data.

Findings

As students' reflective documents were coded, advisory council participants discussed emerging themes and categories. Findings were grouped within the six reflection categories and are listed in tables 2, 3, 4, 5, 6, and 7. Corresponding samples of the reflective statements posed by participants also are included in these tables. Examination of the student teacher reflections revealed both connections and disconnections between university coursework and classroom teaching experiences, as well as insight into how these student teachers understood their beginning classroom experiences. Relationships between the categories and themes that evolved during further analysis are included in the discussion section.

Table 2
Summary of Content and Curriculum Findings from Student Teacher Reflections

Theme 1	**Preservice teacher education courses were valuable in preparing students to teach.**
	I believe that the majority of classes I have taken have been geared towards teaching me content and curriculum…my student teaching has deepened my content knowledge...that is, I have learned more about the programs I have been teaching by teaching them to the students.
Theme 2	**Students were able to apply knowledge and skills to classroom teaching.**
	Actually teaching lessons has made me more knowledgeable of content and curriculum in my area, and the more lessons I teach the more familiar I will get with the material.
Theme 3	**Content courses provided students with the knowledge they needed to prepare and deliver their lessons effectively.**
	My university is where I learned to be an effective teacher. The courses there honed my skills and have taught me how to teach others how to perform certain tasks.
Theme 4	**Preservice teacher preparation gave students the skills and abilities to remain current in their subject areas.**
	I have really seen the importance of staying current in my subject area.
Theme 5	**Students successfully related content and curriculum to real live situations.**
	I am very glad that one of my teachers stressed the importance of relating the subject material to real life situations. During my student teaching experience, I came to realize just how much of a difference that can make in student interest.

Table 3
Summary of Knowledge of Students and Their Learning Findings from Student Teacher Reflections

Theme 1	**Students were prepared to maintain high expectations for all their students.**
	First and foremost, I believe as a teacher that all my students are capable of learning at high levels and it is my job to hold high expectations for each individual.

Theme 2   **Teaching was enhanced because preservice teachers took time to learn about their students, their environments, and their abilities.**

One way I tried to get to know my students and find out how they learned and process information was to just talk to them. When I wasn't lecturing and the students were working on activities and projects, when I would walk around the room, I would take opportunities to ask students what they liked and disliked about an assignment. What works for them? How can things be changed to make them learn better. I think this method of constantly asking students how they learn helps a teacher construct their lesson plans to student knowledge and learning.

Theme 3   **Student teachers came to the realization that all students are different and must be taught according to their unique needs and abilities.**

Adapting to students different abilities is more difficult in practice than it is in theory. I feel like I was well prepared to come up with ideas to adapt to different learners, but finding the time to implement them in the classroom was very difficult. Also, figuring out what kind of learner each student was took some time. I wish there was a way to do this easily.

Theme 4   **Preservice teachers experienced the importance and relevance of infusing instructional variety into their teaching.**

My education classes as well as my practicum experiences have prepared me for teaching diverse learners and adapting my curriculum for those learners.

Theme 5   **Teaching was more effective when student teachers established positive relationships students and parents.**

I made a point to see my students outside of the classroom. By involving myself in students' activities outside of the classroom, I think I was able to show my students that I was truly interested in them.

Table 4
Summary of Learning Environments Findings from Student Teacher Reflections

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Theme 1   **Students lacked confidence, knowledge, and social skills regarding the teaching of diverse groups.**

I think that diverse learners should be addressed more in the courses. Also, there should be more Special Needs courses offered within the education major. I did not feel adequately prepared for this area, but teaching diverse learning styles is something that a teacher is always learning and changing to accommodate.

Theme 2   **Student teachers discovered that using a variety of teaching activities helped them in reaching diverse learners.**

I learned that certain individuals learn by seeing, others by hearing, and some by doing. To be an effective teacher I learned that I should have various lesson formats and plans to meet the needs of all these different learners.

Theme 3   **Preservice teachers experienced difficulty transforming theory into practice when dealing with learning environments.**

This is one area where I believe that my program is lacking. While the methods class helped, it was only for two weeks. It would be nice for other classes to have allotted time for this, because I don't think I was totally prepared for my student teaching's learning environment.

Table 5
Summary of Planning and Instruction Findings from Student Teacher Reflections

Theme 1   **Student teachers understood and experienced the importance of planning and preparation to effective teaching.**

The importance of planning was made clear during my student teaching, and I was thankful that lesson plans were taught to me extremely well. My program did a really good job providing me with tons of resources to pull from as well as where to look for new ones.

Theme 2   **Students felt well prepared to plan their instruction and develop their lesson plans.**

If there is one thing I can do, it is plan. I feel like I can make lesson plans in my sleep. This one is completely covered. I can make lesson plans. I can follow curriculum. I can use various instructional strategies. I can change my plans if they don't seem to be getting across what I planned.

Table 6
Summary of Assessment Findings from Student Teacher Reflections

Theme 1   **Students did not feel proficient in constructing assessment instruments.**

I don't think my classes prepared me for assessing students. I felt lost in this area when I started student teaching. I learned about a lot of different types of assessment in the Methods and Curriculum class but did not really know how to use them.

Theme 2   **Student teachers understood the importance of administering different type of assessments.**

Assessment is another strong suite for our program. I have learned a variety of ways to assess assignments, as well as how important it is to inform a student upfront what he or she is responsible for turning in. By providing a student with this information before hand you give them the responsibility to full fill the requirements and limit the amount of excuses and problems and grading the work in the end.

Theme 3   **Preservice teachers found it difficult to manage an equitable grading structure for different types of students.**

Another difficulty that I faced in student teaching was equitable grading. My special needs courses taught me that I would have to adapt grading for my special needs

students. But what happens when you have normal students that are just slower or are hindered by language.

Table 7
Summary of Professionalism Findings from Student Teacher Reflections

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Theme 1 **Preservice teachers understood the importance of continual reflection, growth, and flexibility regarding effective teaching.**

As I have student taught, one of my strengths have been to monitor and adjust instructional strategies in response to learner feedback. I do this through daily reflection. I believe that reflection is the key to becoming an effective and progressive educator. You get better with practice and experience. I have gotten some practice under my belt, so now its time to get a job and get some experience.

Theme 2 **Student teachers experienced the magnitude of their own classroom behaviors.**

I have found that professional conduct involves everything that I say and do both in front of students and out of their sight. I never realized that my students would take note of almost every little thing that I wore, did, and said. I also found that my students liked to talk. Many times students in one class would come in and make a comment or bring up something that I had said or done in another class.

Theme 3 **Students felt confident as a member of the teaching as a profession**

The student teaching block has given me a wonderful forum to practice my skills. With every class I taught and every week that passed, my confidence as a teacher continued to grow which helped myself and the students. As a beginning teacher, often times I did not teach effectively. Sometimes I would forget to tell the students something and other times I would give a wrong answer, but as my confidence grew my fear of failure dissipated. This was a huge breakthrough in building me up to be an effective teacher.

Conclusions and Discussion

GSTEP permitted the CTE teacher educators involved in this project with opportunities to reconceptualize, restructure, and reform their teacher preparation program. The Georgia Framework for Accomplished Teaching provided the model for a comprehensive qualitative study. This study gave CTE teacher educators opportunities to examine the strengths and weaknesses associated with the infusion of the Georgia principles, framework, and indicators into the CTE teacher preparation program. Activities of this project provided experiences and data which will be useful in preparing CTE teachers, who as beginning teachers, will do a "better job in assessing student's capabilities, diagnosing their learning styles, prescribing a curriculum and adjusting teaching practice to reflect the latest research" (Hinds, 2002). Based on the findings from this qualitative study, CTE student teachers were indeed prepared for their student teaching experience and believed that they performed as accomplished teachers. Using the Georgia Framework for Accomplished Teaching to prepare beginning teachers was found to be

appropriate and effective for this group of student teachers. Students felt most prepared or accomplished in four of the six GSTEP Framework categories: (a) curriculum and content, (b) knowledge of students and their learning, (c) planning and instruction, and (d) professionalism. The remaining two categories, learning environments and assessment were categories where student teachers felt less accomplished or prepared to handle in real world situations.

Analysis of student teachers' reflections revealed that while confidence in their teaching ability was high in the areas of content and curriculum, knowledge of students and their learning, planning and instruction, and professionalism, some expressed concern for their preparation to manage the learning environments and to construct effective assessments. While eager and determined to succeed in their student teaching experience, some student teachers expressed that they felt unequipped to manage the learning environments for some diverse student groups effectively. This concern was joined with requests that the program add undergraduate CTE courses in assessment and specific training for classroom management, especially for very diverse populations. While the CTE preservice graduate program does require assessment and diversity as stand alone courses, these are not addressed as individual courses in the CTE preservice undergraduate program. Therefore, student teachers who were graduate students felt more prepared or accomplished in these two categories. A majority of the reflections expressing inadequate preparation in these two categories were from the undergraduate participants.

Undergraduates in CTE teacher preparation are required to take a special needs course. However, that course does not specifically target diverse cultural groups. Preservice CTE undergraduate students do not take a separate course that deals specifically with diversity related issues. Preservice CTE graduate students are required to take a course that deals only with diversity. Preservice CTE undergraduate student teachers who expressed concern in managing learning environments for diverse groups had encountered a diversity of students from socio-economic and racial groups with whom they appear to have had little experience, either in social or school settings.

The majority of the student teachers' reflections revealed a growing confidence in their abilities to exhibit skills associated with accomplished teaching and to make decisions for their classrooms. Collier proposed that 'reflection is widely considered an important, if not primary, means through which preservice teachers can become effective decision makers" (1997, p. 3). The student teachers in this study appear to value their reflection processes as beneficial for their growing ability to make productive choices as new teachers. Similarly, reflection also serves as a method for self evaluation for new teachers about their decision making and accepting the responsibility for those selections (Goodman, 1984; Ross, 1989; Zeichner and Liston, 1987; and Galvez-Martin and Bowman, 1998). The student teachers in this study appeared to demonstrate their ability to reflect on their strengths as well as to discern areas that will require additional resources and practice.

Recommendations

In reviewing the data and findings with the advisory council, the strengths and weaknesses of the reconceptualized teacher preparation program in career and technical education were identified. Based on these findings, the following recommendations are made:

1. Teacher educators should consider using the Georgia Framework for Accomplished Teaching as a basis for preparing teachers.
2. Courses and teacher preparation programs need more emphases placed on teaching diverse learners.
3. Courses and teacher preparation programs need more emphases placed on developing effective assessments.
4. Preservice teachers should be encouraged to regularly reflect on their preservice teacher preparation and experiences.

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Psychosocial Differences by CTE Discipline and Personality Type in Student Teachers

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ABSTRACT

The purpose of the study is to describe differences in career and technical education (CTE) student teachers' perceptions of psychosocial support provided by student teachers, as separated by CTE discipline(Agricultural Education and Family and Consumer Sciences Education) and personality type, at a southern state university. The group was more female than male. The most frequent personality types for the sample were ESTP, ENFP, and ESFJ. ESTP was the most frequent personality type for Ag Ed student teachers; ESFJ was the most frequent for FCS Ed. Psychosocial assistance is being provided to student teachers by their cooperating teachers from some extent to a large extent. The acceptance function was reported as the largest extent provided by the sample and by the Ag Ed student teachers; friendship for FCS Ed. Social was reported the lowest function for both groups. The E-I personality type dichotomy experiences the largest difference.

Introduction and Theoretical Framework

The cooperating teacher is important in the student teaching process. Literature in education (Lemma, 1993; Posner, 2000; Roe & Ross, 1994; Schwebel, Schwebel, Schwebel, & Schwebel, 1996; Weamser & Woods, 2003), Agricultural Education (Deeds, Flowers, & Arrington, 1991; Edwards & Briers, 2001; Garton & Cano, 1996; Harlin, Edwards, & Briers, 2002; Norris, Larke, & Briers, 1990; Peiter, Terry, & Cartmell, 2005; Schumacher & Johnson, 1990) and Family and Consumer Sciences (Montgomery, 2000) corroborate this statement. There are studies focusing on the student teacher-cooperating teacher relationship aspect of the overall student teaching experience (Kitchel & Torres, in press; Kitchel & Torres, 2005; Montgomery, 2000). From an efficacy standpoint, Knobloch and Whittington (2002) recommend that student and novice teachers need to feel like they are "part of a team of teachers who are supportive to each other in helping students learn" (p. 337). Given the role of the cooperating teacher in student teaching, that relationship becomes paramount to the development and efficacy of the student teacher as they transition to being an in-service teacher.

This study represents a partial replication of a study conducted by Kitchel and Torres (in press). In that study, Dunkin and Biddle's (1974; as cited in Cruickshank, 1990) model was applied to the context of student teaching (Figure 1). It was argued that the cooperating teacher would befit the role of teacher and the student teacher would befit the role of pupil or student. According to the model, the teacher (cooperating teacher) possesses presage variables that influence his or her behavior in the learning environment. The pupil or student (student teacher) possesses context variables that similarly influence his or her behavior within the learning environment. The learning environment (the cooperating site) then becomes the context in which the student teacher and cooperating teacher interact.
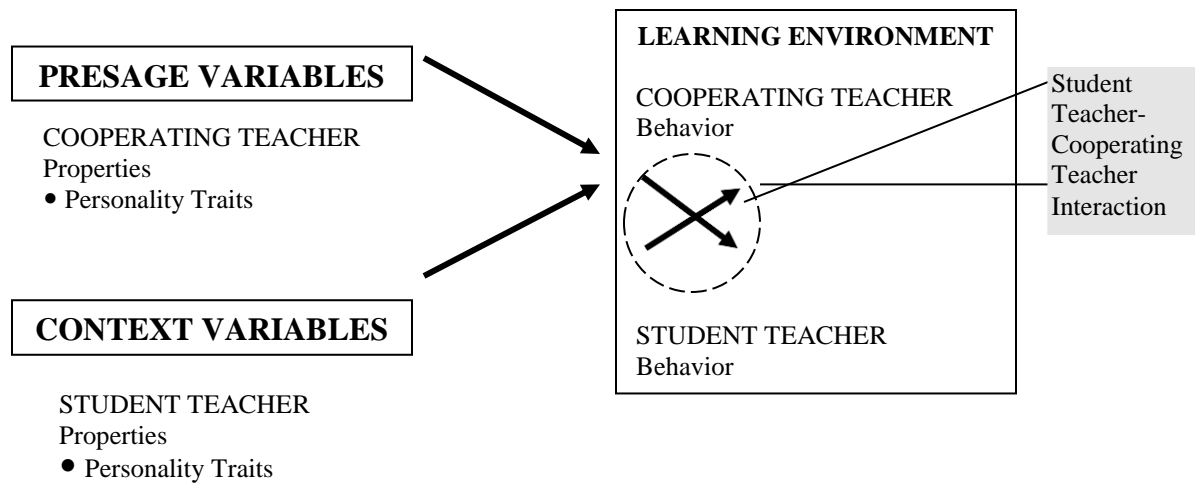
Figure 1. Components and variables of interest in the current study

Personality Type Theory Utilized to Describe Presage and Context Variables

Jung's (1971) psychological type theory was used as the theoretical framework to describe a potential set of presage of context variables. The most widely applied interpretation and operationalization of this theory is the Myers-Briggs Type Indicator (MBTI®). Jung's theory, as interpreted by Myers, McCaulley, Quenk and Hammer (2003) "is that much seemingly random variation in behavior is actually quite orderly and consistent, being due to basic differences in the way individuals prefer to use their judgment and perception" (p. 3).

The theory operates under the assumption that personality is comprised of four sets of dichotomies: *extraversion-introversion* (E-I), *sensing-intuition* (S-N), *thinking-feeling* (T-F) and *judging-perceiving* (J-P). Each person's type preference exists somewhere between all four sets of these dichotomies. According to Myers, et al. (2003), the E-I dichotomy focuses on orientations of energy, where extraverts tend to focus on the "outer world of people and objects" (p. 6), introverts tend to focus on the "inner world of experience and ideas." (p. 6). For the S-N dichotomy, the differences lie in processing and perception. Individuals who prefer the more sensing end of the dichotomy prefer to perceive with their senses, where more intuitive individuals tend to perceive patterns and interrelationships. The T-F dichotomy is defined by how situations are judged. Thinking individuals tend to use logic and objectivity where feeling individuals tend to use social values and harmony to guide them. Finally, the J-P dichotomy is defined by a person's attitude toward the outer world. Judging individuals approach the outer world with structure and closure, where perceiving individuals approach the outer world with spontaneity and openness.

Studies related to teaching reveals that, as an occupational trend, teaching and/or education are prominently ISFJ, INFJ, ENFP, ESFP, ESFJ, and ENFJ (Myers, et al., 2003). The common thread in these types is the feeling end of the T-F dichotomy. Kitchel and Torres (in press) found Agricultural Education student teachers and cooperating teachers to be more sensing, thinking and judging. This finding was consistent with Kitchel and Cano (2001) in a study examining nine years of Agricultural Education major at The Ohio State University. Similar studies could not be located for Family and Consumer Sciences Education or Career and Technical Education teachers or pre-service teachers.

The MBTI® has also been utilized to describe phenomena related to teaching and learning. Fairhurst and Fairhurst (1995) describe the different types in the context of teaching and learning in their book *Effective Teaching, Effective Learning*. Within the text is the psychological type theory applied to students, teachers and learning. Myers, et al. (2003) similarly synthesized research to describe learning preferences by the different dichotomies. Related, Nardi (2001) used personality type as a lens for understanding the educational concept of multiple intelligences. The MBTI® has also been used in the contexts of work satisfaction (Myers, et al., 2003), occupational trends (Hammer, 1993), team building (Hirsh, 1992), higher education (Provost & Anchors, 1987), and relationships (Myers & Myers, 1995). As Kitchel and Torres (in press) posit, the extensiveness of the MBTI® gives support to its potential predictive use as a means of understand student teacher and cooperating teacher interaction.

Psychosocial Theory Utilized to Describe the Learning Environment

Kram's (1985) work in mentoring was utilized in putting a theoretical underpinning to the learning environment or the context in which the student teacher and cooperating teacher interacts. Part of the overall mentoring theory suggests that there are psychosocial functions that assist mentors in the psychological development of their protégé. According to Hall (1986), these psychosocial functions "enhance a sense of competence, clarity of identity, and effectiveness in a professional role" (p. 162).

The functions Kram (1985) identified are: *acceptance*, *friendship*, *role model*, and *counseling*. A mentor (or applied in this study's context – cooperating teacher) who applies acceptance attempts to induct the protégé (student teacher) into the profession. A mentor applying the friendship function attempts to build a relationship as a friend; developing someone the protégé can trust. The role model function is applied when the mentor purposefully exhibits behaviors of an ideal professional. The counseling function is applied when the mentor listens and attempts to assist the protégé with problems. Greiman (2002), through a review a literature, added the *social* function. A mentor demonstrates this function by interacting with the protégé outside of the working context.

Montgomery (2000) states that "prior to the student teaching semester, both the student teacher and cooperating teacher should examine alternative relationship models which support professional development" (p. 13). Perhaps a common theory could be Kram's psychosocial theory. As stated previously, Kitchel and Torres (in press) found that that Agricultural Education student teachers were receiving psychosocial assistance from their cooperating teachers. Also, it

was found that personality type was not very influential of the extent cooperating teachers provided student teachers and that the findings were similar for both cooperating teachers and student teachers. Again, similar findings could not be located for either Family and Consumer Sciences Educators or for Career and Technical Educators.

There are several differences in the current study and the original Kitchel and Torres (in press) study. First of all, the sample differs. As Kitchel and Torres recommend, their study should be replicated at different universities. Secondly, the Form G of the MBTI® was utilized whereas that form is now phased out by Form M. It raises the question that given these changes in the study, would differences exist between in psychosocial support by personality type? Lastly, the context consisted solely of Agricultural Education student teachers. Would other Career and Technical Education disciplines differ in these perceptions as well?

Purpose and Objectives

The purpose of the study is to describe differences in career and technical education (CTE) student teachers' perceptions of psychosocial support provided by student teachers, as separated by CTE discipline and personality type, at a southern state university. To achieve this purpose, the following objectives were developed:

1. Describe characteristics (personality type profile by discipline, gender, CTE discipline) of the group.
2. Describe differences in psychosocial support by CTE discipline (Agricultural Education and Family and Consumer Sciences).
3. Describe differences in psychosocial support by personality type.

Procedures

The population for the study was Agricultural Education and Family and Consumer Sciences Education student teachers at a southern state university. The sample ($n = 19$) was a time and place sample representing student teachers in the 2005-2006 school year. Given the small sample size, this study was selected to be more exploratory in nature and therefore is descriptive-survey in design versus relational.

Two data collection instruments were utilized. The Myers-Briggs Type Indicator (MBTI®) was utilized the measure personality type. The Mentoring Relationship Questionnaire (MRQ) was utilized to measure psychosocial assistance. The characteristics of gender and discipline were obtained from student teaching rosters.

Psychological type was operationalized by the MBTI® personality type instrument. Form M of the instrument was utilized. Part I consisted of 26 items asking preference to how one would behave. Part II consisted of 47 items asking one to select which one of two words is the most appealing. Part III consists of another 20 items similar to Part I. This form is a product of several previous forms preceding Form M and was constructed utilizing the item response theory. Much time was dedicated toward its validity and reliability as a personality type instrument.

Psychosocial assistance was measured by the MRQ developed originally by Greiman (2002) for beginning teachers and mentors, and later adapted for student teachers and cooperating teachers by Kitchel and Torres (in press). The instrument consisted of 15 items (three items per function) relating to the extent to student teacher perceived the cooperating teacher provided psychosocial assistance. A 7-point Likert-type scale was utilized with: 1 = not at all, 3 = some extent, 5 = large extent, and 7 = very large extent. A panel of experts reviewed the MRQ for face and content validity. A pilot test was conducted with alphas ranging from .93 to .99 for the parts of the MRQ, which were in the parameters established by Nunally (1967).

Data were collected from the student teachers during their final seminar, after the completion of the student teaching experience. Because data were collected by the researchers personally, the response rate was 100% ($n = 19$). Agricultural Education student teachers were in the field with their cooperating teacher for a 16-week period. Family and Consumer Sciences student teachers were also in the field for 16-weeks, but split their experiences into two 8-week experiences: one with a high school and one with a middle school. Family and Consumer Sciences student teachers completed one MRQ on their cooperating teacher with whom they had the best experience.

Data were analyzed based upon the objectives and the variable's level of measurement. For objective 1, data were analyzed by percents and frequencies. For objective 2, means scores and standard deviations were calculated by the two disciplines (Agricultural Education and Family and Consumer Sciences Education). Objective 3 was similarly analyzed by mean scores and standard deviations, but data were differentiated by the four MBTI® dichotomies.
Findings

Objective one described the personal characteristics of student teachers. Personal characteristics include MBTI® personality type, gender, and CTE discipline (Table 1). The most frequent personality types for the sample were ESTP, ENFP, and ESFJ with a frequency of 3 (15.79%) for each type. ESTP was the most frequent personality type by Agricultural Education (Ag Ed) student teachers ($n = 3$; 42.86%). For Family and Consumer Sciences (FCS Ed) Education student teachers, the most frequently reported personality type was ESFJ ($n = 3$; 25.00%). ISFP and ESTJ each had the least frequently reported personality type for the total group ($n = 1$; 5.26%), except for ISTP, ENTJ, ENTP, INTJ, INTP, INFJ, and INFP which were not reported at all. Ag Ed student teachers did not contain the ISFJ, ESFP, ESTJ, ESFJ, ISTP, ENTJ, ENTP, INTJ, INTP, INFJ, and INFP types. Similarly, the FCS Ed student teachers did not contain the ISFP, ESTP, ISTP, ENTJ, ENTP, INTJ, INTP, INFJ, and INFP types.

Gender was examined with females reported as most frequent ($n = 14$; 73.68%). Males were more frequent for agricultural education ($n = 5$; 71.23%), whereas females were reported for FCS education ($n = 12$, 100.00%). CTE discipline was also analyzed with 7 agricultural education students (36.84%) and 12 family and consumer sciences education students (63.16%).

Table 1
Personal Characteristics of Student Teachers

Characteristic	Ag Ed ($n = 7$)	FCS Ed ($n = 12$)	Total ($n = 19$)

	Frequency	%	Frequency	%	Frequency	%
MBTI Type						
ISTJ	1	14.29	1	8.33	2	10.53
ISFJ	0	0.00	2	16.27	2	10.53
ISFP	1	14.29	0	0.00	1	5.26
ESTP	3	42.86	0	0.00	3	15.79
ESFP	0	0.00	2	16.27	2	10.53
ENFP	1	14.29	2	16.27	3	15.79
ESTJ	0	0.00	1	8.33	1	5.26
ESFJ	0	0.00	3	25.00	3	15.79
ENFJ	1	14.29	1	8.33	2	10.53
ISTP	0	0.00	0	0.00	0	0.00
ENTJ	0	0.00	0	0.00	0	0.00
ENTP	0	0.00	0	0.00	0	0.00
INTJ	0	0.00	0	0.00	0	0.00
INTP	0	0.00	0	0.00	0	0.00
INFJ	0	0.00	0	0.00	0	0.00
INFP	0	0.00	0	0.00	0	0.00
Total	7	100.00	12	100.00	19	100.00
Gender						
Male	5	71.43	0	0.00	5	33.33
Female	2	28.57	12	100.00	14	73.68
Total	7	100.00	12	100.00	19	100.00

The psychosocial assistance cooperating teachers provided student teachers were analyzed (Table 2). The acceptance function was reported as the largest extent provided by the sample ($M = 6.25$), and by the Ag Ed student teachers ($M = 6.14$). FCS Ed student teachers reported the psychosocial function of friendship as being provided to the largest extent ($M = 6.39$). Social was reported the lowest psychosocial assistance function provided from their cooperating teacher by Ag Ed student teachers ($M = 4.43$), FCS Ed student teachers ($M = 3.64$) and the sample ($M = 3.93$). With this function of social, the standard deviation indicates greater variances of respondents than the other psychosocial functions ($SD = 2.04$).

Table 2

Mean Scores of Psychosocial Assistance Cooperating Teachers Provided to Student Teachers by Discipline (Ag Ed or FCS Ed)

Function	Ag Ed (n = 7) Mean	SD	FCS Ed (n = 12) Mean	SD	Total (n = 19) Mean	SD
Acceptance	6.14	.57	6.31	.57	6.25	.70
Counseling	6.05	.59	6.00	.83	6.02	.73
Friendship	6.00	.67	6.39	.91	6.25	.83
Role Model	5.71	.59	6.22	.99	6.04	.99
Social	4.43	1.65	3.64	2.25	3.93	2.04

Note. 1 = not at all, 3 = some extent, 5 = large extent, and 7 = very large extent

Objective three described differences in psychosocial support by personality type. The personality type dichotomies of E-I and S-N were analyzed by psychosocial support in Table 3, with differences of psychosocial support with T-F and J-P personality types described in Table 4.

Table 3

Mean Scores of Psychosocial Assistance Cooperating Teachers Provided to Student Teachers for the E-I Dichotomy and the S-N Dichotomy

Function	Extravert (n = 14) M	SD	Introvert (n = 5) M	SD	Sensing (n = 14) M	SD	Intuition (n = 5) M	SD
Acceptance	6.01	.73	6.67	.41	6.33	.70	6.00	.71
Counseling	5.85	.70	6.47	.69	6.05	.78	5.93	.64
Friendship	6.14	.86	6.53	.71	6.21	.89	6.33	.71
Role Model	5.79	1.03	6.73	.43	6.05	1.07	6.00	.85
Social	3.50	2.03	5.13	1.71	4.26	1.83	3.00	2.53

Note. 1 = not at all, 3 = some extent, 5 = large extent, and 7 = very large extent

Table 4

Mean Scores of Psychosocial Assistance Cooperating Teachers Provided to Student Teachers for the T-F Dichotomy and the J-P Dichotomy

Function	Thinking (n = 6) M	SD	Feeling (n = 13) M	SD	Judging (n = 10) M	SD	Perceiving (n = 9) M	SD
Acceptance	6.00	1.11	6.36	.58	6.33	.77	6.15	.65

Counseling	6.22	.62	5.92	.78	6.13	.77	5.89	.71
Friendship	5.94	.95	6.38	.77	6.30	.95	6.19	.73
Role Model	5.78	1.28	6.13	.87	6.13	1.06	5.93	.97
Social	4.78	1.39	3.54	2.22	3.87	2.23	4.00	1.94

Note. 1 = not at all, 3 = some extent, 5 = large extent, and 7 = very large extent

Student teachers who were more extraverted described their cooperating teacher providing the friendship function as being provided to the largest extent ($M = 6.14$). However, student teachers who were introverted identified the psychosocial function of role model as being provided to the largest extent ($M = 6.73$). More sensing student teacher described the psychosocial function of acceptance as being provided to the largest extent ($M = 6.33$), whereas student teachers who were more intuitive viewed the friendship psychosocial function as being provided to the largest extent ($M = 6.33$). The psychosocial function of social was described as the lowest extent by student teachers with extravert ($M = 3.50$), introvert ($M = 5.13$), sensing ($M = 4.26$), and intuition ($M = 3.00$) personality types. In each personality type, the greatest variance displayed was in the social psychosocial function for extravert ($SD = 2.03$), introvert ($SD = 1.71$), sensing ($SD = 1.83$), and intuition ($SD = 2.53$).

Student teachers who were more thinking described the psychosocial function of counseling as provided by their cooperating teacher to the largest extent ($M = 6.22$). However, feeling student teachers described the psychosocial function of friendship as being provided to the largest extent ($M = 6.38$). The more judging student teachers described the psychosocial function of acceptance as being provided to the largest extent ($M = 6.13$), whereas student teachers who were more perceiving viewed the friendship psychosocial function to the largest extent ($M = 6.19$). The psychosocial function of social was described as the lowest extent by student teachers with thinking ($M = 4.78$), feeling ($M = 3.54$), judging ($M = 3.87$), and perceiving ($M = 4.00$) personality types. Within the social psychosocial function, the greatest variance was in the thinking ($SD = 1.39$), feeling ($SD = 2.22$), judging ($SD = 2.23$), and perceiving ($SD = 1.94$) personality types.

The E-I dichotomy experiences the largest difference between the two opposite types of extraversion and introversion. When calculating the mean score of the differences between the opposites across the five function, the E-I dichotomy had a mean score of .85. This was followed by T-F ($M_{diff} = .54$), S-N ($M_{diff} = .38$), and J-P ($M_{diff} = .17$). The E-I dichotomy was the only dichotomy with the higher mean scores aligned with one of the opposites. For the E-I scale, all psychosocial function mean scores were higher for introverts than extraverts.

Conclusions, Implications and Recommendations

CTE student teachers mostly possessed the MBTI® personality types ESTP, ENFP, and ESFJ. Agricultural Education (Ag Ed) student teachers were ESTP, whereas Family and Consumer Sciences Education (FCS Ed) student teachers were ESFJ, ISFJ, ESFP, and ENFP. Ag Ed student teachers were male, FCS Ed student teachers were female, and overall, CTE student teachers were female. The implications are that there are some variances in personality

type and gender across disciplines. FCS Ed student teachers were more feeling, whereas Ag Ed student teachers are more thinking. The findings of the FCS Ed student teachers are aligned with the feeling preference by teachers and educators in general (Myers, et al., 2003). The findings of the Ag Ed students are consistent with Kitchel and Cano (2001) who posit that the preference toward thinking is due to the agricultural context. Therefore, it is recommended that teacher educators and cooperating teachers be aware of the discipline differences and adjust teaching and mentoring to match the personality type of the student teacher.

Both Ag Ed and FCS Ed student teachers perceive they are receiving psychosocial assistance from their cooperating teachers. This is consistent with the findings of Kitchel and Torres (in press). Acceptance was perceived to be the psychosocial assistance provided by cooperating teachers to their student teachers for the CTE group as a whole and for Ag Ed. FCS Ed cooperating teachers were perceived to have provided the psychosocial function of friendship to the student teachers.

Social was the lowest psychosocial assistance function provided from their cooperating teacher by Ag Ed student teachers, FCS Ed student teachers, and the sample. With this social function, greater variances of respondents than the other psychosocial functions exist. Again, this is consistent with Kitchel and Torres (in press) who suggest that this function either be fully expected of cooperating teachers or dropped due to the amount of time a student teacher is expected to be with their cooperating teacher. However, taking into account the variance, and now consistency of findings in three Ag Ed institutions and now in a different discipline, perhaps it would be wise to take into account the different social needs of each student teachers separately.

Student teachers who were more extraverted described their cooperating teacher as having provided friendship function the most, however, student teachers who were introverted identified their cooperating teacher as having provided the role model function the most. More sensing student teachers described acceptance as the psychosocial function being provided the most, whereas student teachers who were more intuitive viewed the friendship psychosocial function being provided the most. Counseling was perceived to have been provided to the largest extent by thinking student teachers; for feeling student teachers is was the friendship function. Judging student teachers viewed the acceptance function to have been provided to the largest extent; for perceiving student teacher it was the friendship function.

This implies that different types perceived the functions differently. However, most differences in the function mean scores, between the opposites of the dichotomies, were not large except for the differences between extraversion and introversion in the E-I dichotomy. This was also the only dichotomy where one end of the opposite, introversion, had higher mean scores than the other end, extraversion. According to Myers, et al. (2003), the E-I dichotomy focuses on orientations of energy, where extraverts tend to focus on the "outer world of people and objects" (p. 6), introverts tend to focus on the "inner world of experience and ideas." (p. 6). Why would introverts perceive that their cooperating teacher provided psychosocial assistance more than extraverts, if it is in the nature of an introvert to focus on the internal versus the external? Perhaps one reason may be that extraverts, who attend to the outer world, expected more from the cooperating teacher. Teacher educators and cooperating teachers are recommended to pay

attention to these differences in their student teachers. Cooperating teachers may have to pay attention more to their extraverted student teachers than their introverted student teachers.

The social psychosocial function was viewed to have been provided to the least extent by student teachers by extravert, introvert, sensing, intuition, thinking, feeling, judging, and perceiving student teachers. This implies that no matter the personality type lens that student teachers perceived this function to be provided to the least extent. Again, it is recommended to expect this function from cooperating teachers, drop the function as an expectation or utilize this function on a case-by-case basis.

Recommendations for Further Study

Data should be collected from the Family and Consumer Sciences student teachers regarding both cooperating teachers. In this study, student teachers were asked to complete the MRQ regarding their cooperating teacher with whom they had the best experience. This may provide insight as to differences in school level or reveal patterns of satisfaction or dissatisfaction regarding psychosocial assistance.

This study should be replicated at the same institution to increase the sample size. Once the sample size increases, other statistical tools may be in order to analyze the data. For this study, caution was taken due to the lower sample size. It is also recommended to conduct a qualitative study to uncover potential reasons behind the E-I differences. An in depth qualitative study may provide more depth behind the extraverts and introverts perception.

This study should continue to be replicated at the other institutions to determine if differences exist. Although there was a smaller sample size in the current study versus the Kitchel and Torres (in press) study, there is some evidence to suggest that personality type differences exist. Other institutions may deliver similar or refuting results.

Benefits and barriers to the student teacher-cooperating teacher relationship should also be studied. Differences exist between the two disciplines and among personality types. The positives and negatives to the relationship might also differ. These benefits and barriers may provide teacher educators concrete knowledge that can assist them in adjusting their student teaching experience in favor of strengthening the student teacher-cooperating teacher interaction.

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Career and Technical Education Administrators' Perceptions of Secondary teachers' Attire as Indicated by Selected professional Attributes

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ABSTRACT

The purpose of this study was to assess the perceptions of career and technical education (CTE) administrators toward secondary teachers' attire as indicated by 10 occupational attributes. The population consisted of CTE administrators employed by West Virginia Department of Education during 2006-2007 academic school year. The top three attributes perceived by CTE respondents as influencing women's and men's traditional clothing were: professionalism, responsibility, efficiency. In the leisure attire category, the top three attributes for women's and men's clothing were: responsibility, honesty, and knowledgeability. Commonalities existed between women's and men's business casual clothing on the following top two attributes: responsibility and professionalism. Business casual was perceived by CTE respondents as the dominant category of attire on their campus. Overall, CTE administrators perceived that secondary teachers' attire does affect the professionalism of teachers.

Many times in life situations a person may be judged by how well dressed they appear. The same holds true for teachers, whether in the classroom setting, during a job interview, their appearance at a parent conference or open house. Gorham, Cohen, and Morris (1999) reported on the importance of teachers to dress "professionally" and be attentive to impressions made during the first few weeks of class. According to Molly (1975), clothing can be regarded as a primary impression management tool. Delisio (2006) reported that, "dressing appropriately" was once considered to be a phrase with universal meaning. However, in an age where flip flops appear in White House photos, some school districts want to make it clear how they expect all staff members – including teachers – to dress" (p.1). Damhorst, Miller-Spillman, and Michelman (2005), noted that, "dress is an essential part of human experience. Perhaps because of its closeness to the body, dress has a richness of meanings that express the individuals, as well as groups, organizations, and the larger society in which that person lives" (p.XIV).

According to Storm (1986), dress is defined as "a body covering, attachment, or treatment; it is essentially our appearance" (p.vii). A study by Underwood, Kenner, and McCune (2002) suggests that an individual's appearance is essentially non-verbal communication and influences the perception and validity of the spoken word. Failure to dress appropriately can impact the way administrators, teachers, students, and parents perceive the teacher in question.

Dress in the Workplace

Saiki (2006) reported that:
In recent years there has been confusion about what is appropriate to wear at work. A whole generation has been raised in jeans, t-shirts, and sweats. Popular media has described a shift back to a preference for formal dress in the workplace as many companies are attempting to change expectations of work place attire.

The CEO of Managers Recruiters International said that managers, when surveyed, were upset with the open-toed shoes, tank tops, and sweat pants worn to work. Companies have been calling in fashion experts to teach their employees about appropriate workplace dress. (p.1)

It appears that selection of professional attire enhances occupational attributes of teachers. Attire is important and can give a degree of authority, even in today's casual school environment (Underwood, et al., 2002). In this era of teacher accountability, career and technical education administrators should be in the forefront in setting the standards for dress in public schools. Appropriate attire has become extremely important in many professions. The clothing industry has been quick to meet the symbolic need for attire that translates into power, success, and desired outcomes (Kwon, 1994). This trend appears to be true in today's more casual world and increasingly diverse environment. Although professional attire is, in fact, of major importance in winning respect in the classroom and in conveying the appropriate public image of what happens in schools, little has been written on the subject. According to Underwood, et al. (2002), all of the research in this area was prior to the business casual dress-down movement in the 1990's.

Damhorst et al. (2005) noted that:
Dress in the workplace is important because most working people spend 40 to 60 hours a week at their job. That is a lot of human interaction to consider. Appropriate dress can make the difference in receiving a job offer, appearing effective in a job role, and receiving a promotion. Understanding how dress can facilitate or hinder human interaction in the workplace can give employees a head start on making favorable impressions at work. Most importantly, dress is a powerful communicator – especially in the workplace. (p.222)

Theoretical Base/ Conceptual Framework

Sybers and Roach (1962) reported that, "the first formal exploration of areas of possible research in textiles and clothing related to social sciences was at a conference of family and consumer sciences, sociologists, psychologists, and economists held in 1947 at Teacher's College, Columbia University" (p.185). Roach (1997) argues that, "many initial and enduring perceptions of an individual are formed by observation and evaluation of the clothing he/she wears" (p.126). Clothing may serve as an indicator of the type of profession or career track the wearer has. Attitudes, beliefs, and values of an individual, may also be influenced by their attire (Roach, 1997). Rozenfeld and Plax's study suggests that the personality or psychological disposition of the wearer can be attributed by their clothing (as cited in Roach, 1997).

Several researchers (as cited in Gorman et al., 1999) suggest that clothing affects four kinds of judgments: credibility, liability, interpersonal attractiveness, and dominance. Gorham et al. (1999) reported that:

On the whole, studies of a person's perceptions related to dress consistently suggest three conclusions: (1) clothing does affect observer perceptions, especially "cool" perceptions such as a wearer knowledge, educational background, preparation or poise, level of

sophistication, and competence (e.g., Bassett, 1979; Bickman, 1974; Harris et al., 1983; Lefkowitz, Blake, & Mouton, 1955; Miller & Rowald, 1980); (2) clothing that enhances "cool" perceptions may decrease 'warm' judgments such as interpersonal attractiveness, trustworthiness, sociability, likability, and enthusiasm (e.g., Leathers, 1992; Raiscot, 1983; Smith & Malandso, 1985); and (3) females appear to be more responsive to clothing cues than are males (e.g., Kuehwe & Creekmore, 1971; Miller & Rowald, 1980; Solomon & Schloper, 1982). (p.282)

Perception is the process of taking in data through our senses and transmitting that data to the brain where it is selected and identified and given significance through organization and interpretation (Storm, 1986). Perception is determined by our unique life experience such as our culture, the people significant to us who have formed our frame of reference, and our education (Storm, 1986). Rosencranz (1972) suggests that the association of greater clothing awareness with higher socioeconomic level, higher educational level, and higher participation in more social groups, reflects opportunities for building more command of the language of dress.

Self-Perception Theory

Self-perception theory and implicit personality theory provided the theoretical models for this study. According to Banks (2007):

Self-perception theory is a theory that examines how individuals assess themselves when asked to respond to information, situations and circumstances. Bem (1972) identified two postulates that explain self-perception theory: (a) individuals come to "know" their own attitudes, emotions, and other internal states partially by inferring them from observations of their own overt behavior and/or the circumstances in which this behavior occurs; (b) to the extent internal cues are weak, ambiguous, or uninterruptible, the individual is functionally in the same position as an outside observer who must necessarily rely upon those same external cues to infer the individuals inner states (p.2). Individuals also use self-perception to explain their behavior by noting the conditions under which it occurs (Irving & Meyer, 1985). When assessing decisions that have been made by individuals, researchers should consider that the decision made is based upon the person's self-perception and their expectations at the time of the decision. (p.3)

According to self- perception theory (as cited in Kwon, 1994) individuals evaluate themselves just as they evaluate others. Specifically, the processes people use to infer their own attitudes and other internal states from the observation of overt behavior are not substantially different from those they apply in inferring others' attitudes. Self-perception theory suggests that variables, such as appearance or clothing, are likely to affect perceptions of others, and may affect perceptions of self (Kwon, 1994). Clothes often become external cues which are accessible to us and others for observation (Kaiser, 1990). Researchers (Asch, 1946; Scheneider, 1973) suggest that people often infer particular traits of a person based on other characteristics possessed by that individual. This tendency to infer some traits from knowledge about other traits has been termed "implicit personality theory" (Bruner & Tagiuri, 1954; Scheneider, 1973). Kwon (1994) suggests that individuals tend to form mental constructs concerning proper modes of dress over a period of time and embodies a range of situations based on experiences.

Many people experience the positive psychological effects of wearing an appropriate outfit in a work setting. Morale can be boosted when an outfit elicits positive comments and compliments from others. Conversely, the feeling of being inappropriately dressed for a job can generate fear of negative evaluations and reactions from others, leading to an undermining of self-confidence (Solomon & Douglas, 1985). Research has shown that first impressions are primarily based on demeanor, including posture, behavior, and dress (Storm, 1986). The importance of attire in first-impression formation is so significant that the "universe of appearance may, in fact, be regarded as the guarantee, foundation, or substrate of the universe of discourse" (Stone 1970, p.231). Evidence also suggests that when people dress according to their role expectation(s), others are more likely to respond to them as the roles would dictate. Thus, students have been found to work harder for teachers who are more formally attired (Storm, 1986).

Rural-Urban

People have been found to be more cooperative with other individuals whose appearance is similar to their own. Thus, they have been found to be more likely to talk with, sign a petition for, or provide information to an individual dressed similarly to them (Suedfeld et al. 1971, 1972). First impressions and dress cues are generally more important in urban than rural or small-town settings. Urban contacts are brief and infrequent. Rural or small-town contacts are more repetitive and longer, and some things about the other individual have usually already been ascertain. For these reasons, it is also easier to use attire to mislead others in an urban setting (Storm, 1986).

Impact of Gender

Men's attire has been found to be a less important cue than women's, although dress seems to be used as a cue by men more than women. Evaluations of others appear to be more extreme when made about individuals of the opposite sex (Storm, 1986). In fact, it appears "that dress is one of the most salient cue sexes stereotyping… [and this] is so marked that sex stereotype origins may be a result of the predominance of dress as a cue in early socialization" (Hamid, 1969, pp.193-94). Several researchers (Forsythe, Drake, & Cox, 1984; Kelley, Blouin, Glen, Sweat, & Arledge, 1982), have investigated women's employment attire and perceptions of appearance related to career orientation. Forsythe, et al. (1984) reported that career dress had a positive effect on the perception of selected personal characteristics. Such studies suggest that people perceived "dressing well and appropriately" as important for career advancement.

According to study by Singer and Love (1988) which investigated gender differences in self-perceptions of occupational efficacy in law enforcement workers, females indicated less favorable self occupational images than male officers. Both sexes reported similar levels of psychological well-being, job satisfaction, and job involvement. Research has found certain items of attire are associated with specific stereotypes. Some of these associations are glasses with intelligence, religiousness, shyness, naiveté, lack of physical attractiveness, conventionality, and dullness; make-up, bright colors, and high hemlines with sophistication, immorality, and physical attractiveness (Storm, 1986). Mathes and Kemper (1976) reported that "people do

believe that certain kinds and styles of clothing are indicative of liberal sexual attitudes and behavior" (p.497). For men, these items were: tank tops, bare feet, open shirts. For women, they were, cut-offs, hip-hugger pants, hoop earrings, tops exposing midriffs, work shirts, T-shirts, blue jeans, short shorts, halter tops, sun dresses, sandals, sweaters, and bare feet. As revealed by decades of research, clothing is an important form of non-verbal communication that affects perceptions of others.

Purpose and Objectives

The primary purpose of this study was to assess the perceptions of CTE administrators toward secondary teachers' attire as indicated by selected attributes. A secondary purpose of the research was to add to the knowledge base concerning the impact of teachers' attire on CTE administrators' perceptions. The specific objectives of the study were to:

1. Determine CTE administrators' level of satisfaction regarding secondary teachers' attire.
2. Describe impact of selected issues and trends on secondary teachers' attire as perceived by CTE administrators.
3. Ascertain factors most influencing secondary teachers' attire as perceived by CTE administrators.
4. Describe CTE administrators' perceptions toward leisure, business casual and traditional category of attire.
5. Assess CTE administrators' perceptions regarding secondary teachers' attire as indicated by selected professional attributes.

Limitations of the Study

1. Due to the small sample size, findings and conclusions should be inferred only to the selected participants of this study and not CTE administrators in general.
2. Because of the scant research data available on CTE administrator's perceptions of secondary teachers' attire, the study sought to develop important baseline data. Thus, the entire population of CTE administrators was surveyed. Consequently, the data do not lend themselves to tests of statistical significance.

Procedures

The population for this study consisted of 78 career and technical education administrators employed by West Virginia Department of Education during 2006 – 2007 academic school year. Due to the small number ($\underline{N}$=78) of individuals in the population, a census was used for this study. In order to control frame error, a current list of CTE administrators and their mailing addresses were requested from West Virginia State Department of Education.

The research instrument consisted of a questionnaire tested by Kenner, Underwood, and McCune (2002a). Appropriateness and permission for the use of this instrument was discussed

with the primary author. The questionnaire consisted of two parts. Part I consisted of line drawings of dress modes: traditional, business casual, and leisure for both male and female. Participants were asked to rank the three sets of styles per gender according to ten occupational attributes (Kwon, 1994) on a five- point Likert scale. Part II consisted of selected demographic variables and background information. Content and face validity of the instrument was assessed by a panel of experts in career and technical education and educational administration. Cronbach's alpha was used to estimate the internal consistency of the instrument. The reliability coefficient was .98 for the instrument used in this study.

Data for the study were collected by mailed questionnaire. The questionnaire, along with a cover letter and a stamped return envelope, was sent to all CTE administrators ($\underline{N}$ = 78) in this study. After 10 days, a second mailing was sent to all non-respondents. Ten days after the second mailing, a reminder letter was sent to all non- respondents stressing the importance of participation. Approximately 10 days following the third mailing, telephone calls were made to non- respondents. Fifty seven CTE administrators completed and returned the questionnaire for a final useable response rate of 73 percent. Babbie (1998 p. 262) argues that a response rate of 70 percent is regarded as "very good." Non- response error was controlled by comparing late respondents to on – time respondents as outlined by Krushat and Molnar (1993) who noted late respondents tend to reply similarly to non- respondents. A comparison of these groups revealed no differences in the responses of late and on – time respondents.

Data were analyzed using the Statistical Package for Social Sciences (Version 14.0 for Windows). Descriptive statistics were used to describe the distribution of the data.

Findings

Individual characteristics for CTE administrators participating in the study are presented in Table 1.

Table 1

Characteristics of CTE Administrators Participating in the Study

($\underline{N}$ = 57)

Characteristic	Category	$\underline{n}$	(%)
Gender:	Female	23	(40)
	Male	34	(60)
Age:	25-49 years	19	(33)
	50-55 years	22	(39)

	56 and above	16	(28)
Education:	Master	53	(93)
	Doctorate	2	(3.5)
	Other	2	(3.5)
Years as an Administrator:	1-5 years	14	(24)
	6-10 years	13	(23)
	11-20 years	22	(39)
	Over 20 years	8	(14)
Location of School:	Rural area/less than 5,000	20	(35.1)
	Rural area/5,001 – 10,000	19	(33.3)
	Town of 10,001 – 50,000	15	(26.3)
	Town of 50,001 – or more	13	(5.3)

Objective 1. Determine male and female CTE administrators' level of satisfaction regarding secondary teachers' attire.

Forty seven percent of the CTE administrators were somewhat satisfied with secondary teachers' attire on their campus. Male participants indicated a higher level of satisfaction of secondary teachers' attire on their campus when compared to their female counterparts (Table 2).

Table 2

CTE Administrators' Perceptions of Dress Satisfaction by Gender

($\underline{N}$ = 57)

Dress Satisfaction	Gender		Total
	Female	Male	
	%	%	
Satisfied	16	28	44

Somewhat Satisfied	19	28	47
Not Satisfied	5	4	9
Total			100

V = .132

Objective 2. Describe impact of selected issues and trends on secondary teachers' attire as perceived by CTE administrators.

Table 3 lists selected issues and trends impacting secondary teachers' attire as perceived by CTE administrators.

Table 3

CTE Administrators' Perceptions about the Impact of Selected Issues and Trends on Secondary Teachers' Attire
(N = 57)

Question	Yes n %	No n %
In the last year, has a teacher been required to leave campus due to inappropriate dress?	2 3.5	55 96.5
Do you have dress exceptions for certain faculty?	26 45.6	31 54.4
In your opinion, does attire affect the professionalism of teachers?	54 94.7	3 5.3
Have you encountered problems with body piercing and/or tattoos among teachers?	10 18	47 82
Do you foresee current trends in body adornment becoming problematic in teachers' attire?	38 67	19 33
Do you think your teachers would benefit from a workshop on professionalism which includes dress and business etiquette?	37 65	20 35
Would you like to see teachers on your campus in a required uniform?	23 40	34 60

A majority (94.7%) of the respondents reported that attire does affect the professionalism of secondary teachers. However, just over two-thirds (67%) foresee current trends in body adornment becoming problematic in secondary teachers' attire. Over three-fifths (65%) of CTE administrators perceived that secondary teachers would benefit from a workshop on professionalism which includes dress and business etiquette. Almost 4% of the respondents reported cases of inappropriate attire on their campus.

Objective 3. Ascertain factors most influencing secondary teachers' attire as perceived by CTE administrators.

Choices of comfort, school setting, lack of knowledge of appropriate attire, and lack of income were listed as the factors influencing secondary teachers' attire. Table 4 lists comfort as the number one factor in apparel selection.

Table 4

Rank Order of Factors Most Influencing Secondary Teachers' Attire as Perceived by CTE Administrators

Factor	Rank	M	SD
Comfort	1	3.64	0.64
School Setting	2	2.96	0.94
Lack of Knowledge of Appropriate Attire	3	1.85	0.78
Lack of Income	4	1.59	0.72

Objective 4. Describe CTE administrators' perception toward leisure, business casual and traditional category of secondary teachers' attire.

Three-fifth (60%) of CTE administrators reported that the current secondary teachers' attire on their campus was business casual. Over two-thirds (66.7%) of CTE administrators indicated their attire preference as a teacher was business casual (see Table 5)

Table 5

CTE Administrators' Perceptions Toward Leisure, Business Casual, and Traditional Attire

Statement	Category of Dress		
	Leisure	Business Casual	Traditional
	n	n	n
	%	%	%

In general, the current teachers' attire on my campus is:	24 40	33 60	0.0 0.0
The dress code on my campus should be more:	7 12.3	41 71.9	9 15.8
I foresee teachers' attire on campus becoming:	28 49.1	26 45.6	3 5.3
When I was a teacher, my attire was:	4 7.0	38 66.7	15 26.3
As an administrator, my attire is:	2 3.5	11 19.3	44 77.2

A majority (49.1%) of the CTE respondents perceived leisure attire as becoming the current dress on their campus in the future. Over two-thirds (77.2%) of the respondents wore traditional attire as an administrator.

Objective 5. Assess CTE administrators' perceptions regarding secondary teachers' attire as indicated by selected professional attributes.

Table 6

[a]*Means and Standard Deviations of Professional Attributes of Secondary Teachers' Attire as Perceived by CTE Administrators*

Professional Attributes:	Women's Clothing						Men's Clothing					
	Traditional		Business Casual		Leisure		Traditional		Business Casual		Leisure	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
1. Responsibility	3.89	1.20	4.01	0.95	2.56	0.96	3.89	1.22	4.01	0.97	2.57	0.94
2. Competence	3.64	1.30	3.77	1.05	2.40	0.92	3.66	1.32	3.79	1.11	2.43	0.94
3. Knowledgeability	3.54	1.31	3.66	1.10	2.40	0.90	3.54	1.32	3.63	1.09	2.45	0.94
4. Professionalism	4.00	1.16	3.89	0.77	2.24	0.95	4.07	1.09	3.87	0.82	2.26	0.97
5. Honesty	3.40	1.29	3.54	1.15	2.42	0.96	3.36	1.31	3.49	1.18	2.45	1.00
6. Reliability	3.63	1.24	3.71	1.01	2.29	0.90	3.59	1.26	3.66	1.05	2.35	0.97
7. Intelligence	3.54	1.33	3.61	1.14	2.33	0.98	3.49	1.35	3.59	1.16	2.42	1.01
8. Trustworthiness	3.47	1.35	3.52	1.19	2.33	0.95	3.42	1.36	3.56	1.16	2.40	0.97

9. Willingness to work hard	3.59	1.36	3.71	1.03	2.26	0.95	3.61	1.37	3.73	1.06	2.35	1.02
10. Efficiency	3.66	1.27	3.77	0.98	2.29	0.98	3.66	1.28	3.71	1.01	2.29	0.92

[a]Scale: 1 = None; 2 = Little; 3 = Some; 4 = Very Much; and 5 = Excellent.

The means for the top three attributes (Table 6) for *females* were: **traditional attire:** professionalism ($\underline{M}$ = 4.00), responsibility ($\underline{M}$ = 3.89), and efficiency ($\underline{M}$ = 3.66); for **business casual:** responsibility ($\underline{M}$ = 4.01), professionalism ($\underline{M}$ = 3.89), and efficiency ($\underline{M}$ = 3.77); for **leisure attire:** responsibility ($\underline{M}$ = 2.56), honesty ($\underline{M}$ = 2.42), and knowledgeability ($\underline{M}$ = 2.40).

The means for the top three attributes for *males* were: **traditional attire:** professionalism ($\underline{M}$ = 4.07), responsibility ($\underline{M}$ = 3.89), and efficiency ($\underline{M}$ = 3.66); **business casual:** responsibility ($\underline{M}$ = 4.01), professionalism ($\underline{M}$ = 3.87), and competence ($\underline{M}$ = 3.79); **leisure attire:** responsibility ($\underline{M}$ = 2.57), knowledgeability ($\underline{M}$ = 2.45), and honesty ($\underline{M}$ = 2.45).

The professionalism attribute was rated by CTE administrators with a mean score of 2.24 and 2.26 respectively for women's and men's clothing in the leisure category of dress attire.

Discussion, Conclusions, and Implications

It appears that secondary teachers' attire represents an emerging concern among CTE administrators. Results of this study revealed that the following professional attributes were likely to have and impact on secondary teacher's attire as perceived by CTE administrators: professionalism, responsibility, and competence. The typical respondent in this study was 50 years and older (67%), completed a master's degree (93%), served in the capacity as a CTE administrator for 6 years and above (76%), worked in a secondary school district located in a rural area (68.4%), and more likely to be a male (60%). Female CTE administrators were less likely to be satisfied with the perceptions of secondary school teachers' attire when compared to their male counterparts. This finding implies that women are socialized to pay more attention to appearance than men are. On the other hand, males' perceptions of clothing are probably connected to social status and hierarchy (Kwon, 1994). In a multistate [Texas, North Carolina, Nebraska, Pennsylvania, and Utah] study by Kenner, Underwood, and McCune (2002b), over two-fifths of the principals were somewhat satisfied with faculty dress on their campus.

The following issues and trends were perceived by respondents as impacting secondary teachers' attire: professionalism of teachers, current trends in body adornment becoming problematic, and the need for a workshop on dress and business etiquette. Fashion changes over time, as do attire rules and expectations (Gorham, et al., 1999). According to Damhorst et al. (2005), "dress is a chronicle of a historical era. As fashion or norms of dressing change over time, trends in technology, the economy, religion, the arts, notions of morality, social organization, and patterns of everyday living are reflected in dress" (p.2). Several researchers (Strauss & Howe, 1991; Paul, 2002; & Damhorst et al., 2005) argue that tattooing and piercing grew in popularity with Generation X (born between 1965 and 1976).

Parkay and Stanford study's (as cited by Simmons, 1996) revealed that parents and teachers alike are counseling some of our most able young people not to go into teaching. The reasons ranged from low salaries to lack of status. Noesfirwan and Crawford (1982) perceived the manner of one's attire as critical to the way in which the public regards their profession, and Molly (1975) noted that teachers are not paid like professionals because they do not look like professionals.

Comfort was ranked as the most important apparel selection affecting secondary teachers' attire. This finding is supported by a multistate study done by Kenner et al. (2002b). It appears that the variable "comfort" is likely to be a reliable predictor accounting for the choice of dress attire as perceived by CTE administrators.

CTE administrators perceived business casual as the dominant category of attire on their campus. In contrast, traditional attire was worn by most (77.2%) CTE administrators. However, a surprising finding revealed that over two-fifths (49.1%) the respondents perceived secondary teachers' attire on their campus becoming "leisure." It appears that acceptance of diversity of appearance is becoming a trend in today's global society.

Simmons (1996) reported that teachers' attire is a touchy subject because of the legal implications of the possible infringement on personal liberties. Simmons (1996) further argues that teachers' attire has become a matter of individual choice. CTE administrators perceived that if traditional attire was worn, the teacher was perceived as being overwhelmingly professional, responsibility, and efficiency. This finding is similar to a study reported by Kenner et al. (2002b). However, in their study, the three attributes were: professional, responsibility, and competence. Rollman (1980) reported that teachers dressed formally were rated "most organized."

Leisure attire accounted for a reduction in mean scores, when compared to traditional and business. In this study, leisure attire was not perceived by CTE administrators as the recommended dress attire for their teachers. If business attire was worn, the teacher was perceived as being overwhelmingly responsible, professional, and competent. The "responsibility attribute" was the only common attribute in the top three means for both men's and women's clothing across all three modes of dress attire. This finding suggests that CTE administrators perceived the responsibility attribute as a powerful communicator of secondary teachers' attire when compared to the other professional attributes. Damhorst et al. (2005) noted that "appropriate work dress conveys that individuals not only understand their work roles but can perform them effectively" (p.218).

Recommendations

1. Since family and consumer science teachers are generally regarded as having expertise in selected areas of attire, they should be consulted by CTE administrators to serve in an advisory capacity to a committee charged with conducting workshops on: dress and business etiquette, current trends in body adornment, and general professionalism in the classroom.

2. Qualitative research targeting CTE students and their parents' perceptions of secondary teachers' attire should be done.
3. Further research should explore whether attire is linked to stereotypes / prejudices, or whether attire has implications for the way CTE administrators treat their teachers.
4. Comparative research on CTE teachers and administrators' perceptions regarding secondary teachers' attire should be done in both rural and urban school districts.
5. Additional research on the role of nonverbal communication in CTE classrooms will provide valuable instructional insights for CTE administrators and secondary teachers.

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Teacher Preparation in Career and Technical Education: A Model for Developing and Researching Early Field Experiences

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ABSTRACT

Leading educational researchers have called for a framework for implementing and researching early field experiences (EFE). Yet, a review of literature revealed that a comprehensive model focusing on the structure and content of EFE was an important element missing from the literature. The primary purpose of this study was to synthesize the literature related to the structure and content of EFE. This study resulted in the development of a four-component model depicting a framework for EFE programs. The four primary components of the model are foundation, organization, implementation, and evaluation. The model provides the structure for developing a variety of early field experiences while maintaining continuity among programs and allowing for cultural diversity and individual flexibility. The EFE model provides a framework for focused research within EFE as well as the development, reorganization, and assessment of EFE programs.

Introduction and Background

Experiential learning has been a hallmark of career and technical education (CTE). It has allowed CTE educators to utilize constructivist and contextual learning approaches, which help students integrate new knowledge and experience with previous knowledge in a real-world manner (Gordon, 2008). The same philosophical approach occurs collegiately in professional programs like law, medicine, business, and teaching (Darling-Hammond, 2006). Teacher education programs, especially CTE teacher education programs, have incorporated this philosophy as a means of putting ideals into action. EFE is an experiential component of preservice teacher education, which offers career exploration and later teacher development.

Teacher preparation programs, including CTE, should provide a foundation for continual learning about teaching and develop a greater focus on creating high-quality, clinical learning experiences (National Commission on Teaching and America's Future, 1996). It is imperative for preservice teachers to understand that the world of teaching is complex and such an understanding will lead to better analysis of the teaching and learning processes (McIntyre, Byrd, & Foxx, 1996). A didactic curriculum of course work and clinical field experiences allows preservice teachers to identify linkages between theory and practice.

Field experiences are needed as a means to transition from an academic to a field-based learning environment because those skills students have developed in the academic world (e.g., reading books, writing papers, and studying for exams) are considerably different than the skills needed to learn from their own teaching and field experiences (Carter & Anders, 1996). Not only do field experiences provide opportunities for preservice teachers to interact with the students they will be teaching and develop appropriate teaching strategies (Knowles & Cole, 1996), but

they also increase cognition in professional coursework and better prepare preservice teachers (Cruickshank, 1990).

The importance of field experiences has not been disputed among educators (Guyton & Byrd, 2000). At issue is the degree to which field experiences vary among teacher education programs and the impact such variance has on the effectiveness of EFE. It is the narrow focus of most practicums and the lack of attention to school and community context that often causes students to be unprepared for the full scope of the teaching role (Zeichner, 1996a). Such issues prompted Ducharme and Ducharme (1996) to espouse the need for research on the structure and content of EFE programs. Other researchers have expanded upon this call, asking for a well-developed frame that would allow researchers to develop better questions and methods in an effort to get at the context of the experience (Clift and Brady, 2005; Darling-Hammond, 2006). Yet, such a comprehensive model focusing on early field experiences in teacher education in career and technical education is an important element missing from the literature.

Purpose and Procedures

The primary purpose of this descriptive qualitative study was to make meaning of the literature related to the structure and content of EFE programs. The analysis of information was conducted in two stages. In the initial stage, documents published between 1980 and 2008 that addressed issues related to either the structure or content of EFE were selected for analysis because, as Merriam (2002a) espouses, insights and clues can be obtained from documents. Any documents that referred to the structure, which was defined as those elements that discuss the organization and delivery of EFE, or content, which was defined as learning strategies, activities, and other expectations required of the experience, were retained for the study.

Educational Resources Information Center (ERIC) and Education Abstracts were the primary databases used to find articles focusing on early field experience. Thirty-three articles were gathered from the following sources: *Action in Teacher Education; Childhood Education; Journal of Agricultural Education; Journal of Education for Teaching; Journal of Physical Education, Recreation, and Dance; Journal of Teacher Education; Teacher and Teacher Education; The Teacher Educator; Teaching and Teacher Education;* and *The High School Journal.* An online library catalog search was conducted at a Midwestern Doctoral Extensive Research Institution to identify all holdings related to early field experience. The search yielded 23 books and other sources not indexed in ERIC and Education Abstracts. The examination of these types of documents as a data source adds to the strength of the qualitative study (Merriam, 2002a).

The second stage focused on assessing, reorganizing, and interpreting the existing knowledge (Marsh, 1991). The first author coded and analyzed the literature, allowing general themes to evolve throughout the study. The materials began to delineate into four categories: 1) foundation for EFE, 2) organization of EFE, 3) implementation of EFE; and 4) assessment of EFE. These categories culminated into a framework of EFE (Figure 1). A detailed description and analysis of each category follows beginning with the foundation for EFE and then building upon it with the organization, implementation, and assessment components. The entire process underwent peer review to ensure the validity (Merriam, 2002b).

Foundation: Standards and Conceptual Framework

Many within the education profession acknowledge the role EFE plays in the development of preservice teachers (McIntyre et al., 1996). Because EFE is a valuable experience, accreditation organizations, professional organizations, state licensure units, and teacher education programs have incorporated EFE into their accreditation standards, licensure requirements, and curricula, respectively. The resulting standards, recommendations, and requirements provide the premise for early field experiences.

Figure 1. Model for Early Field Experiences in Teacher Education

Standards

A confluence of standards from a variety of entities provides the institution with the overarching expectation of EFE. Two nationally recognized accrediting agencies, the National Council for Accreditation of Teacher Education (NCATE, 2002) and the Teacher Education Accreditation Council (TEAC, 2002), provide standards for the development and assessment of EFE. Professional organizations like the Association of Teacher Educators (ATE) have developed a set of standards for field experience, which are meant to "correspond with, compliment, and extend the NCATE standards" (Guyton & Byrd, 2000, p. 4). The American Association for Agricultural Education (AAAE, 2001) is an example of a subject-specific professional organization that has developed what it calls the *National Standards for Teacher Education in Agriculture*. Other professional organizations such as the Interstate New Teacher Assessment and Support Consortium (INTASC, 1992), which offers model standards for beginning teacher development that focus on developing the beginning teacher regardless of subject matter taught, and the National Science Teachers Association (NSTA, 2003), which is a subject-specific organization that provides content standards intended to be used as a framework for teacher education programs, provide standards that effect EFE programming.

States and institutions of higher education have also developed standards, which generally coincide with national and professional organization standards. Most states have developed standards that are used as the basis for state licensure or certification (Hurst, Tan, Meek, & Sellers, 2003). Similarly, educational institutions have developed standards as part of their conceptual framework for their teacher education program as required by NCATE. The inclusion of these standards provides the foundation for the entire EFE program.

Conceptual Framework

The identified standards serve as the context and basis from which the institution's conceptual framework for teacher education is built. The initial step in complying with national standards is the development of a conceptual framework, which establishes a shared vision and provides a direction for programs, courses, teaching, candidate performance, scholarship, service, and unit accountability (NCATE, 2002; TEAC, 2002). The conceptual framework should align with the various aspects of the teacher education program (i.e., learning and program outcomes) with INTASC principles, state and national board standard (Dottin, 2001).

Organization: Experiences, Placement, and Documents

With the foundation for EFE established through the standards and conceptual framework, the organizational phase can be addressed. The organizational stage addresses the types of EFE experiences, placement issues, and the development of EFE documents.

Types and Numbers of Experiences

A primary issue in organizing EFE is the number and type of experiences. McIntyre et al. (1996) espouses that what occurs during the field experience is more important than the length of the experience, but continued by suggesting that teacher education programs increase the number and variety of EFE sites to dilute the impact of any single experience. Similarly, Knowles and Cole (1996) asserted that, too often, field experiences are "too short, too structured, too focused

on the immediacy of the classroom action, and too detached" (p. 654). The result is the development of teachers who continue to teach as they were taught because their field experiences were superficial, procedural, and merely a rite of passage.

The National Commission on Teaching and America's Future (1996) argued that a major flaw in teacher education is the disconnection between coursework and field experiences. Howey and Zimpher (1989) reported that exemplary teacher education programs link coursework and field experiences. Carter and Anders (1996) suggested that EFE, offered in conjunction with methods courses, help to more closely integrate the primary goals of the teacher education program. EFE can be embedded in the foundation, methods, or other pedagogical courses with specific connections back to the course and its related content. At other times, it may be more conducive to offer stand-alone experiences, which may meet and fulfill other expectations of the standards and conceptual framework. A combination of laboratory, clinical, and practicum-based experiences, which would allow more ideal and reflective experiences, should be considered.

Placement

Placement is a crucial component of teacher preparation (McIntyre et al., 1996) and the selection of the cooperating teacher is the single most important activity in determining the success of the experience (Vertuno, 1995). The primary pedagogical practice associated with EFE placement has been the use of exemplary sites, which enables preservice teachers to emulate model teachers (Carter & Anders, 1996). In addition, Goodland (1990) urged teacher education programs to place students in quality programs rather than those that are most convenient. Preservice teachers should be placed cooperatively with input from both the teacher education program and the cooperating school system (Vertuno).

Howey and Zimpher (1989) reported finding a well-developed field experience component among exemplary teacher education programs. Early clinical field experiences should occur in controlled, natural settings as a means to better prepare preservice teachers for what they will experience as student teachers, as well as to help eliminate feelings of anxiety and nervousness (Everhart & Turner, 1996). At a minimum, the site must offer a suitable range of teaching approaches and models (Carter & Anders, 1996). The staff must have a common interest in and a commitment to the preparation of preservice teachers (Carter & Anders) and students must be assigned to outstanding teachers who can serve as models (Jaquith, 1995). Also, adequate diversity of students and teachers is important (AAAE, 2001; Carter & Anders; NCATE, 2002). The importance of placement lies in the fact that preservice students tend to model the teaching style and methods of the cooperating teacher, even when they contradict the theory and practices addressed in the university classroom (Moore, 2003).

Although most structured field experiences are conducted in public or private school settings, alternative settings, which provide a different context for teaching and learning processes, may enhance the professional development of those involved (Carter & Anders, 1996; Knowles & Cole, 1996). There is a need to go beyond the classroom to community-based field experiences where students see their role as part of a whole community rather than as an isolated, individualized classroom (Zeichner & Melnick, 1996). Such sites could include various camps and community-based programs, tutoring or remedial centers, child care centers, community workshops and classes, Sunday school classes, 4-H clubs, and babysitting (Carter & Anders).

Documents

The use of syllabi and handbooks may be predicated in part by the types of early field experiences. The syllabus serves as a checklist (Stark & Lattuca, 1997) and a guide to the instructor's philosophical approach to the course including an explanation of the purpose, rationale, course content, and procedures. Because most student learning occurs outside the classroom, planning for assignments and out of class activities is important (McKeachie, 2002). Although there is no standard model for syllabus development (McKeachie), several authors provide guidelines (e.g., McKeachie; Stark & Lattuca).

A handbook is a broader, more overarching guide that serves as a communication and public relations tool (Slick, 1995). The handbook serves as the means to communicate the guiding principles of the field experiences, describe the purpose and key components of EFE, and articulate the roles and responsibilities of those involved in the experience. As a public relations tool, the handbook communicates the complexity and importance of the teacher education role in teacher preparation and reflects upon the nature of the institution (Slick).

Implementation: Interaction, Outcomes, and Learning Strategies

The previous two components, the foundation and organization, provide the impetus for active learning to occur during EFE, which is the premise for the entire early field experience. Student development occurs at the implementation stage of the model because 1) student outcomes and the associated active learning strategies are developed, and 2) defined roles and positive interaction among the preservice teacher, the cooperating teacher, university supervisor, and peers are established.

Interaction

The success and effect of EFE are completely dependent upon the interaction among those involved in the early field experience including the interaction between the university and cooperating school, and is a result of a dialogic process, where reflection, theory, and practice inform one another (Zeichner, 1996b). There is a need for open and direct communication and the development of EFE programs that have collaboration, accountability, and an environment where communication between the teacher education program and school can occur (McIntyre et al., 1996; NCATE, 2002). The extent and quality of field experiences are dependent upon the attitudes and practices related to guidance and supervision (Knowles & Cole, 1996).

Interaction should be deliberate and intentional in an effort to eliminate the lack of communication between the institution and cooperating site, which includes a lack of agreement as to the responsibility of each participant (McIntyre et al., 1996), the concern for the uneven quality of supervision and mentorship (Zeichner, 1996a), and the frustration associated with the varying expectations between students and teacher educators (Keheller, Collins, & Williams, 1995). Issues of role definition and expectations are critical to any discussion about the relationships within field experiences (Knowles & Cole, 1996). EFE can be enhanced when collaborating teachers assist in the negotiation of the practicum curriculum and are treated as equal participants in the practicum.

Outcomes

Jaquith (1995) believed early field experiences could be divided into two types of experiences: early and mid-tier. The early experiences provide the opportunity for career exploration, and the mid-tier experiences provide the opportunity for preservice students to develop teacher-oriented skills. This logic sets the stage for the identification of the two orientations of the EFE model: exploration and teacher development. The outcomes and related learning strategies evolve from these two orientations of EFE.

An initial outcome of early field experience is career exploration (Jaquith, 1995; Kelleher et al., 1995; McIntyre, 1983). Once students have moved through the exploration phase, additional EFEs allow preservice teachers to begin to develop and transition toward becoming a teacher (Jaquith; Knowles & Cole, 1996). At the teacher development stage, the outcomes of EFE include melding theory into practice (Kelleher et al.; NCATE, 2002; Staffo, Baird, Clavelli, & Green, 2002), applying knowledge (NCATE; Pierce, 1996), developing teaching skills (NCATE; Kelleher et al.; Liston & Zeichner, 1991; McIntyre), and transitioning from student to teacher (NCATE; Liston & Zeichner; McIntyre).

Learning Strategies

The learning strategies by which the outcomes of EFE are fulfilled are paramount (Table 1). The initial learning strategies are used to fulfill the career exploration outcome. Once students determine that they want to continue in the teacher education program, additional early field experiences focusing on teacher development outcomes may be implemented using the appropriate learning strategies for each of those outcomes. By the time students enter the student teaching practicum, they should have established the foundational skills necessary for them to continue becoming critically reflective professional educators.

Table 1.

The learning strategies associated with the outcomes of EFE

Orientation	Outcome	Learning Strategies
Exploratory	Career Exploration	• Guided observation (Carter & Anders, 1996; Dobbins & Camp, 2003) • Journaling (AAAE, 2001; Adler, 1993) • Identify characteristics of good teaching (Dobbins & Camp, 2003) • Dialogue (Carter & Anders, 1996; Cruickshank, 1985) • On-campus seminars (Carter & Anders, 1996; Dobbins & Camp, 2003) • Interview/meet administrators, guidance counselors (Dobbins & Camp, 2003)
Teacher Development	Skill Development	• Structured assignments such as distributing supplies and papers, roll call, grading papers • Teaching mini-lessons (Carter & Anders, 1996) • Tutoring (Carter & Anders, 1996) • Analyze different teaching and learning styles (Dobbins & Camp, 2003)
	Application of	• Development of lesson plans

Knowledge	• Analyze case studies (McIntyre et al., 1996)
	• Assess and analyze student learning (NCATE, 2002)
	• Monitor student learning and adjust instruction (NCATE, 2002)
	• Identify teaching principles and strategies (Dobbins & Camp, 2003)
Meld Theory into Practice	• Portfolio development (AAAE, 2001; Huba & Freed, 2000)
	• Teach lessons
	• Utilize formal and informal student assessment strategies (ATE, 1986; NCATE, 2002)
	• Interact with cooperating teacher and university supervisor (Carter & Anders, 1996)
	• Participate in teacher in-service/professional development (ATE, 1986)
Transition from Student to Teacher	• Reflection through writing about teaching (Carter & Anders, 1996)
	• Critique of teaching, teaching environment, and teaching program (NCATE, 2002)
	• Observe teachers practicing reflection
	• Systematic reflection and analysis (National Commission on Teaching & America's Future, 1996; NCATE, 2002; Guyton & Byrd, 2000)
	• Analyze formal and informal self assessment strategies (NCATE, 2002)
	• Express an understanding of ethical, legal, social, and human issues
	• Communicate an understanding of the teacher's role within the community (Knowles & Cole, 1996)
	• Articulate an understanding of the philosophy and goals, importance, and relationship of agricultural education (Dobbins & Camp, 2003)

Assessment: Preservice Teacher and Program

The EFE model is only complete with the assessment of the preservice teachers and the EFE program (Guyton & Byrd, 2000; ATE, 1986). Excellence can only be achieved through a continual improvement process focused on learner-centered assessment and a holistic assessment of the EFE program. In assessing both the preservice teacher and the program, it is important that the assessment be aligned with the other components of the EFE model including standards, conceptual framework, expected outcomes, and related learning strategies.

Preservice Teacher Assessment

The purpose of preservice teacher assessment is to confirm the growth and development in teaching (Guyton & Byrd, 2000). The focus should be on learner-centered assessment.

Learning should be documented by the student through critical thinking, problem-solving, and reflection (Huba & Freed, 2000), rather than on a checklist of completed activities. Rubrics and portfolios are appropriate methods of assessing student-centered learning (Huba & Freed). One pedagogical approach for such assessment and self-evaluation is self-study (Loughran, 2007).

Program Assessment

Program assessment serves as both a validation device and information source for program improvement (Guyton & Byrd, 2000). With a focus on outcomes and learning strategies, outcome mapping would be an appropriate approach to continual improvement. Earl, Carden, and Smutylo (2001) provide a step-by-step approach, which focuses on the areas of intentional design, performance monitoring, and evaluation planning. Ongoing assessment and adequate feedback will ensure that the EFE program continues to be effective (ATE, 1986).

Summary

The ultimate goal of EFE is to prepare preservice teachers to enter field settings knowing what they can accomplish, what they can expect to learn, and how they should conduct themselves (Carter & Anders, 1996). The teaching profession expects teachers to enter the field able to interpret what they see, discern what is being accomplished in a culturally diverse classroom, identify problems to be addressed, and talk ethically and professionally about their observations and experiences. Such field experiences should be encouraged because they have been associated with increased cognition in professional coursework and better preparation as a preservice teacher (Cruickshank, 1990). And, as part of a comprehensive teacher education program, EFE serves a mechanism for creating significant learning experiences, which as Mentkowski and Associates (2000) espouse, helps to validate and solidify the curriculum because students have opportunities to apply learning in real-world settings and in context.

Toms (1996) posited that teacher education programs find themselves attempting to reconcile the program with often conflicting standards from various external influences. The various elements found in each of the four components of the model (i.e., foundation, organization, implementation, and assessment) provide the structure on which an EFE program can be built, evaluated, and reconciled. Early field experiences provide the opportunity for initial exposure and skill development, which if approached properly, will provide the impetus for lifelong learning and the development of a critically reflective professional educator. The result is a framework that further integrates the knowledge deciphered from the literature and is derived from a conceptualization of what it is like to be a teacher (Cruickshank, 1996).

Conclusion

In order for learning and, more importantly, life-long learning to take place, students need experiences that lead to transfer, which is defined as the ability to take what was learned in one context and utilize it in new contexts (National Research Council, 2000). As such, significant learning can only occur when students are engaged, learning is encouraged, and a context for learning is promoted (Fink, 2003). The overarching outcome of this framework and EFE is the establishment of lifelong learning strategies and skills, which can be transferred to the student

teaching practicum and continued throughout an individual's teaching career (Keheller et al., 1995; NCATE, 2002).

While the overall development and implementation of EFE is as individual and contextual as teaching itself, Keheller et al. (1995) endorsed early field experiences that were well-defined and well-developed yet maintained enough flexibility to meet the individual needs of the students. No matter what types of field experiences are developed, preservice teachers will have different experiences because of the variations in the classrooms and cooperating teachers (Chastko, 1993). However, the EFE must be developed conceptually to ensure that the individual development is appropriately focused on meeting the ultimate outcomes of the experience, as identified by the standards and conceptual framework. EFE should be approached with rigor and emphasis similar to that of the student teaching experience. When EFE is fully implemented, active learning begins to prepare preservice students as lifelong learners for their role as a student teacher and, ultimately, as a professional teacher.

This study was a synthesis of literature organized into an integrated model for the purpose of incorporating the wide range of knowledge related to EFE and was assembled and organized in a format appropriate for making practical educational decisions. The model provides structure for the teacher education curriculum and the organizational arrangement as recommended by Zeichner (2005). The results were not developed to depict any institutional or state perspective and only represent information found in the literature.

The EFE model begins to address the concerns of teacher educators and researchers like Cruickshank (1996) who identified a need for identifying outcomes for field experiences, determining the validity of experience as related to the outcome, defining the roles and relationships of all involved, determining methods for preparing each group for their role, establishing the structure and the means for offering a variety of experiences, establishing the assessment of each experience, and enhancing the experience through identifying and verifying new knowledge. The model also begins to address Knowles and Cole (1996) who argued that field experiences should be considered integrally connected and a symbiotic component of the teacher education program. The EFE model serves as the structure for the further integration of extensive, well-supervised clinical experiences that link theory and practice and the enhancement of collaborative relationships between schools and universities (Darling-Hammond, 2006). The model provides a well-developed frame, which could lead to more focused EFE research while also allowing researchers to more fully explore the context of the experience, as recommended by Clift and Brady (2005).

The Framework for Early Field Experience in Teacher Education can be useful to teacher education programs as the profession attempts to meet Zeichner's (1996a) challenge to treat the EFE practicum as seriously as other collegiate courses and components of the teacher education program. The model provides the structure for identifying the various elements of a comprehensive EFE program and serves a mechanism to enable continuity and consistency among programs. Because the framework provides both structure and content for the development, reorganization, and assessment of EFE programs, it could be used as a template for organizing and improving the early field experience, thus increasing the value and utility of EFE.

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