

Teacher Perceptions of the Indiana Workplace Specialist I Licensure Training Program during the 2011-2012 Academic Year

Edward J. Lazaros, Samuel Cotton, and Paul B. Brown

Abstract

Alternative teacher licensure, also known as alternative teacher certification, is a growing national trend in education, and it has long been common in the field of career and technical education. Alternatively licensed teachers often enter teaching with a wealth of subject area knowledge due to their previous work experience. Mentorship programs are one of the best ways to help alternatively certified teachers to successfully navigate their first year in the classroom. This study investigated the teacher perceptions of the Indiana Workplace Specialist I (WSI) licensure training program during the 2011-2012 academic year.

Keywords: Alternative, Licensure, Career, Technical, Education

Introduction

Many states offer alternative paths to teacher licensure. According to the National Center for Education Information, "In 2005, 47 states, plus the District of Columbia, report 122 alternative routes to teaching certification being implemented (n.d.). The literature reviewed in this article will present the common strengths and weaknesses of alternatively licensed teachers and explain how mentoring programs can help these new teachers improve and become long-term members of the teaching profession. This article also reports the findings of a 2012 study which described the perceptions of alternatively licensed Indiana teachers (2011/2012) with regard to the Workplace Specialist I (WSI) alternative licensure training project that they participated in during the 2011/2012 academic year. Data will reveal if the teachers' gender, age, computer experience, experience with online education, or occupational area of expertise influenced their perception of the alternative licensure program.

Traditional Certification vs. Alternative Certification

For a traditional education degree (certification-based route), teachers may need to pass standardized tests, meet a minimum grade point average requirement, and earn a degree from a teacher training program at an accredited college or university. Routes to alternative certification vary from state to state, but many are designed

to certify teachers who have not completed an undergraduate degree in the field of education. Individuals may become certified more quickly through an alternative route than via a traditional one, which makes alternative certification especially appealing when there is a teacher shortage (Ruhland & Bremer, 2002, pp. 3-4). Alternative teacher certification has helped bring more teachers into the profession, evidenced by the number of alternative certifications issued, which grew nationwide from 4,000 in 1992 to 60,000 in 2006. National Center for Policy Analysis researchers Rebecca Garcia and Jessica Huseman stated that alternative certification programs could have other positive effects, in addition to helping alleviate teacher shortages. "Alternative certification programs attract individuals who are committed to teaching and whose non-teaching experiences are valuable in the classroom" (Garcia & Huseman, 2009, p. 2).

Alternative Licensure in Career and Technical Education

Career and technical education has traditionally been more dependent on alternative teacher licensing based on occupational work experience than other program areas, especially in areas such as trade and industry (Cochran & Reese, 2007; Cotton, 2000; Cotton, Koch, & Harvey, 2010). The roots of CTE teacher certification go back the 1917 Smith-Hughes Act. Teachers in such fields as agriculture, family and consumer science, business, and marketing were expected to have a degree in a related subject area and to have completed professional education coursework. Teachers in industrial education and health fields were usually certified on the basis of their occupational experience and completion of minimal course hours in pedagogy. For example, in 1994, almost half of secondary trade and industrial education teachers did not have a bachelor's degree. However, certified CTE teachers bring with them years of experience working as professionals in their fields of instruction (Ruhland & Bremer, 2002, pp. 7-8, 10).

Teacher Preparation

Ruhland and Bremer (2002) surveyed 178 alternatively licensed CTE teachers and 290 tra-

ditionally licensed CTE teachers (with a bachelor's degree in education). The teachers were asked to rate their preparation before they began teaching in the areas of pedagogy, knowledge of subject matter, classroom management skills, and strategies for special populations.

Traditionally licensed teachers were twice as likely as alternatively licensed teachers to rate their preparation in the area of pedagogy as "very adequate," and they were 11% more likely to rate their pedagogical preparation as "moderately adequate." In "knowledge of subject matter," 74% of alternatively licensed teachers said they were prepared very adequately, compared to 56% of traditionally licensed teachers. Regarding classroom management skills, alternatively licensed teachers and traditionally licensed teachers were equally likely to rate their preparation as "very adequate" (18% and 20%, respectively). Of alternatively certified teachers, 15% said they were prepared very adequately for working with special populations, compared to 10% of traditionally certified teachers (Ruhland & Bremer, 2002, pp. 31-33). These percentages suggest that traditionally certified teachers felt better prepared in pedagogy, whereas alternatively certified teachers felt more knowledgeable of the subject matter they were teaching. Only a small percentage of teachers in either category felt very adequately prepared in classroom management skills or in special populations strategies.

Teacher Longevity

Ruhland and Bremer (2002) queried CTE teachers about their intentions to continue teaching. More than 50% of all respondents indicated they planned to continue teaching at least eight more years (52% of traditionally licensed teachers and 58% of alternatively licensed teachers). In both of these categories of teachers, 29% said they would probably continue to teach for three to seven more years. Eight percent of traditionally licensed teachers were actively considering leaving the teaching profession, compared to four percent of alternatively licensed teachers (Ruhland & Bremer, 2002, p. 39). Heath-Camp and Camp (1990) found that 15% of CTE teachers left the teaching profession within their first year, and more than half left within six years.

In the Ruhland and Bremer study (2002), alternatively licensed teachers were more likely to stay in the teaching profession than were traditionally licensed teachers, indicating that they may have been more satisfied with the

profession. However, teachers who come to the profession through alternative licensing feel even less prepared than their traditionally licensed peers for tasks such as creating a positive learning environment and meeting the needs of diverse learners.

Mentorship for Alternatively Licensed CTE Teachers

In the state of Indiana, alternatively certified CTE teachers receive a Workplace Specialist I (WS I) license. They then must complete the WS I training program to be eligible for the Workplace Specialist II license. WS I faculty are assigned mentors during the first year of training to help them adjust to their first year teaching in a classroom. Mentors must have completed five years of kindergarten-12 teaching experience, and they are usually CTE faculty members (Nickolich, Feldhaus, Cotton, Barrett, & Smallwood, 2010, p. 41). Nickolich et al. (2010) surveyed 105 CTE faculty members (60 WS I first-year faculty and 45 mentors) to measure their perceived professional and personal life satisfaction.

"One important finding of this study revealed that Indiana faculty who serve as mentors for first-year CTE faculty were more satisfied with their lives than were the first-year CTE faculty" (Nickolich et al., 2010, p. 47). Many factors may lead to this fact, but one discussed by the researchers is that these older and more experienced faculty members have become "master teachers" through their experiences, thus helping them remain content with their work in spite of increasing pressures and accountability heaped on teachers. The researchers also concluded that experience in teaching leads to more confidence because these mentors had at least five years of teaching experience. Some faculty need time to feel comfortable with teaching. The study concluded with a recommendation to "not underestimate the power of experienced CTE faculty to serve as mentors, coaches, and professional role models for junior faculty" (Nickolich et al., 2010, pp. 47-48).

Well-designed teacher mentoring programs can provide CTE teachers with additional support, thus improving teacher competence, performance, and effectiveness. Mentoring programs for alternatively licensed teachers should be carefully planned and executed so as to minimize confusion on the part of the mentees. Traditionally licensed teachers tend to

view mentoring programs as relatively easy to follow, because often they have been learning how to teach since they began their college degrees. However, alternatively licensed teachers come directly from business and industry, so mentoring is a new experience for many of them, and the educational discussions and activities can be confusing (Briggs, 2008, pp. 2, 5-6).

Recommendations for University Coursework and Mentoring Programs

Briggs (2008) surveyed 151 alternatively licensed CTE teachers, all of whom obtained their recommendation for licensure from The Ohio State University between 1995 and 2006. The intent of the study was to measure the teachers' perceptions of how well their university coursework and mentoring activities had prepared them for their teaching careers. The university coursework and clinical experiences that the respondents found most beneficial dealt with practical content, such as student assessment, lesson planning, and classroom management. Respondents perceived a need for distance learning coursework throughout the licensure program in order to reduce travel time to classes. Also, they did not want to waste time repeating material from university coursework in their mentoring activities. According to the respondents, mentoring is most useful when the following factors are met:

- Mentors and mentees are carefully matched based on similar teaching content,
- Duplication of university materials and employment materials is reduced,
- Paperwork is reduced as much as possible,
- Employers realize that alternatively licensed CTE mentees are overwhelmed,
- And mentors actually take the time to meet with their mentees. (Briggs, 2008, pp. 84-85)

The need for mentorship for alternatively licensed CTE teachers is clear. Alternative certification has grown in popularity recently, in large part the result of teacher shortages, but alternative ways for teachers to enter the classroom have long been common in the field of CTE. Alternatively certified CTE teachers bring an increased knowledge of the subject matter to the classroom as a result of their business and industry experiences prior to teaching. However, they must be given extra preparation in the area of pedagogy to fully prepare them to be teachers. Teachers become more confident and

more effective as they gain experience in the classroom, which is why they need extra help during the first year of teaching. Effective mentoring programs can make a significant difference for alternatively certified teachers, who may be often overwhelmed by their transition to the classroom. By guiding and assisting alternatively certified teachers in key areas, mentors can help the teachers overcome common challenges during their first year, while allowing the teachers' strengths to shine through.

Problem Statement

There is a lack of information related to the perceptions of Indiana WSI teachers with regard to the 2011/2012 WSI teacher training project that they completed.

Purpose of the Study

The purpose of this study was to ascertain the perceptions of Indiana 2011/2012 WSI teachers with regard to the WSI teacher training project that they participated in during the 2011/2012 academic year. These perceptions will provide the individuals involved with the project with data that could guide future program improvement.

The following research questions guided this study:

1. What are the perceptions of teachers with regard to the WSI teacher training project?
2. Did the teachers' gender influence their perception of the WSI teacher training project?
3. Did the teachers' age influence their perception of the WSI teacher training project?
4. Did the teachers' computer experience influence their perception of the WSI teacher training project?
5. Did the teachers' experience with online education influence their perception of the WSI teacher training project?
6. Did the teachers' occupational area of expertise influence their perception of the WSI teacher training project?

Description of the Subject Population

In the state of Indiana, the Indiana Department of Education offers an alternative license known as the Workplace Specialist I (WSI). This license allows an individual to teach in an occupational area in a career center.

A university degree is not required for this type of teaching license, but the individual must have at least a high school diploma or a GED. Also, 6,000 hours of documented work experience in the occupational area for which the individual is to be licensed to teach are required. The hours of documented work experience can be reduced if the individual completes a 2-year degree in the occupational area of the requested license (e.g., automotive technology). The 6,000-hour requirement also can be reduced if an individual completed two years (1,020 hours) in a high school career and technical education (CTE) program in the specific occupational area, holds a license or certification in the occupational area, or completed a formal internship or apprenticeship in the occupational area.

To pursue this alternative path toward licensure, an individual must first be hired and contracted by a school to teach an identified occupational area. Once under contract with a school, the individual applies for the WSI license with the Indiana Department of Education. The individual then applies for the WSI teacher training program during his/her first year of teaching. This WSI teacher training program has a hybrid delivery system. The teachers attend two live remote site training sessions lead by project instructors with assigned locations determined by geography. The teachers participate in online coursework delivered by project instructors in one of eight groups assigned by licensed program area. Mentors with a minimum of five years of teaching experience in a closely related content area assist, supervise, and observe the WSI licensee during the year-long training program. The mentors conduct formal teaching observations that are shared with the project instructors and coordinator. A collaborative environment exists in online discussion forums between teachers and the project instructors. The content of the training program includes classroom management, writing and using standards-based learning objectives, conducting classroom and curriculum assessments, integrating academics into occupational program areas, lesson planning, accessing instructional materials, understanding advisory committees, understanding career and technical student organizations, and understanding how to develop professional development plans. All teachers who participated in the Indiana 2011/2012 WSI teacher training project were invited to participate in this study.

Methodology

Descriptive research was used to investigate data from Indiana WSI teachers who completed the 2011/2012 WSI teacher training project. The population for this study consisted of Indiana WSI teachers ($N = 64$) who completed the 2011/2012 WSI teacher training project. The university students were grouped by their gender (Male / Female), age (22-34, 35-44, 45-54, 55-64, 65 and over), computer experience (No Experience, Some Experience, Experienced, Very Experienced), experience with online education (No Experience, Some Experience, Experienced, Very Experienced), and occupational area of expertise (computer/graphics/PLTW, culinary arts, health sciences, machine/welding/industrial technology, medley), and level of education (GED, high school diploma, some postsecondary training, associate's degree, bachelor's degree, master's degree, doctorate degree). The response rate of the WSI teachers was 72% ($N = 46$).

The survey instrument was used to gather demographic information in the following categories: (1.) Gender, (2.) Age, (3.) Computer Experience, (4.) Experience with Online Education, (5.) Occupational Area of Expertise, and (6.) Level of Education.

The perceptions of Indiana WSI teachers who completed the 2011/2012 WSI teacher training project were investigated using the following nine questions:

1. The WSI teacher training project helped me with classroom management.
2. The WSI teacher training project helped me write and use standards-based learning objectives.
3. The WSI teacher training project helped me with classroom and curriculum assessment.
4. The WSI teacher training project helped me integrate academics into my occupational program area.
5. The WSI teacher training project helped me with lesson planning.
6. The WSI teacher training project helped me learn how to access instructional materials.
7. The WSI teacher training project helped me understand advisory committees.
8. The WSI teacher training project helped

me understand career and technical student organizations.

9. The WSI teacher training project helped me understand how to develop a professional development plan.

Results

Demographic Results

Regarding gender, survey respondents were evenly split between males ($n = 23$) and females ($n = 23$). In terms of age, survey respondents were mostly between 35-44 ($n = 27$, 58.7%). See Table 1 for more information.

Table 1. Age

	Frequency	Percent	Valid Percent	Cumulative Percent
22-34	3	6.5	6.5	6.5
35-44	27	58.7	58.7	65.2
45-54	6	13.0	13.0	78.3
55-64	9	19.6	19.6	97.8
65 and over	1	2.2	2.2	100.0
Total	46	100.0	100.0	

Regarding computer experience, almost half reported some computer experience ($n = 22$, 47.8%). See Table 2 for more information.

Table 2. Computer Experience

	Frequency	Percent	Valid Percent	Cumulative Percent
No Experience	1	2.2	2.2	2.2
Some Experience	22	47.8	47.8	50.0
Experienced	14	30.4	30.4	80.4
Very Experienced	9	19.6	19.6	100.0
Total	46	100.0	100.0	

For experience with online education, many respondents had no experience ($n = 19$, 41.3%) or only some experience ($n = 17$, 37.0%). See Table 3 for more information.

Table 3. Experience with Online Education

	Frequency	Percent	Valid Percent	Cumulative Percent
No Experience	19	41.3	41.3	41.3
Some Experience	17	37.0	37.0	78.3
Experienced	7	15.2	15.2	93.5
Very Experienced	3	6.5	6.5	100.0
Total	46	100.0	100.0	

For primary occupational area of expertise, the most frequent type of occupation was health sciences ($n = 20$, 43.5%). See Table 4 for more information.

Table 4. Primary Occupational Area of Expertise

	Frequency	Percent	Valid Percent	Cumulative Percent
Computer/ Graphics/PLTW	3	6.5	6.5	6.5
Culinary Arts	5	10.9	10.9	17.4
Health Sciences	20	43.5	43.5	60.9
Machine/Welding/ Industrial Technology	9	19.6	19.6	80.4
Multiple or Other	9	19.6	19.6	100.0
Total	46	100.0	100.0	

For highest level of education, associate's degree ($n = 17$, 37.0%) and bachelor's degree ($n = 14$, 30.4%) were most common. See Table 5 for more information.

Research question one sought to investigate the perceptions of teachers who participated in the WSI teacher training project. Responses were collected from the WSI teacher to determine if the training project was helpful. Teachers strongly agreed and agreed the WSI teacher training project was

Table 5. Highest Level of Education

	Frequency	Percent	Valid Percent	Cumulative Percent
Diploma	2	4.3	4.3	4.3
Some Postsecondary Training	10	21.7	21.7	26.1
Associate's Degree	17	37.0	37.0	63.0
Bachelor's Degree	14	30.4	30.4	93.5
Master's Degree	2	4.3	4.3	97.8
Doctorate Degree	1	2.2	2.2	100.0
Total	46	100.0	100.0	

helpful with classroom management 71.1% ($n = 45$), using standards-based objectives 80.0% ($n = 45$), classroom and curriculum assessment 75.5% ($n = 45$), integrating academics into occupational program areas 73.4% ($n = 45$), lesson planning 71.1% ($n = 45$), learning how to access instructional materials 66.7% ($n = 45$), understanding advisory committees 73.4% ($n = 45$), understanding career and technical student organizations 73.3% ($n = 45$), and understanding how to develop a professional development plan 77.8% ($n = 45$). See Table 6 for more information.

understanding advisory committees ($t = -2.478$, $df = 30.22$, $p = .019$), and learning how to develop a professional development plan ($t = -2.149$, $df = 30.93$, $p = .040$). No other differences in agreement were found for the survey items in this section. See Table 7 for means and standard deviations.

Research question three sought to investigate if the teachers' age influenced their perception of the WSI teacher training project. Two age groups were created, which were less than 44 years of age (22-44) and greater than 45 years of age

Table 6. Perceptions of Teachers with Regard to the WSI Teacher Training Project

The WSI Teacher Training Project Helped Me	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	n
With Classroom Management	24.4%	46.7%	17.8%	6.7%	4.4%	45
Write and Use Standards-Based Learning Objectives	31.1%	48.9%	17.8%	0.0%	2.2%	45
With Classroom and Curriculum Assessment	24.4%	51.1%	6.7%	13.3%	4.4%	45
Integrate Academics Into My Occupational Program Area	26.7%	46.7%	13.3%	6.7%	6.7%	45
With Lesson Planning	31.1%	40.0%	11.1%	8.9%	8.9%	45
Learn How to Access Instructional Materials	20.0%	46.7%	17.8%	8.9%	6.7%	45
Understand Advisory Committees	26.7%	46.7%	17.8%	4.4%	4.4%	45
Understand Career and Technical Student Organizations	24.4%	48.9%	17.8%	6.7%	2.2%	45
Understand How to Develop A Professional Development Plan	26.7%	51.1%	8.9%	4.4%	8.9%	45

Research question two sought to investigate if the teachers' gender influenced their perception of the WSI teacher training project. Males more than females agreed that WSI teacher training helped with classroom management ($t = -3.768$, $df = 29.92$, $p = .001$), using standards-based learning objectives ($t = .2430$, $df = 42$, $p = .019$), integrating academics into their occupational area ($t = 3.038$, $df = 29.48$, $p = .005$), learning how to access instructional materials ($t = -2.600$, $df = 36.46$, $p = .013$),

(45 and over). Those that were ages 22-44 did not find WSI teacher training as helpful as those who were 45 and older ($t = 2.390$, $df = 42.96$, $p = .021$). No other differences in agreement were found for the survey items in this section. See Table 8 for means and standard deviations.

Research question four sought to investigate if the teachers' computer experience influenced their perception of the WSI teacher training project. Two groups were created: some experience

Table 7. The Influence of Gender on the Perception of the WSI Teacher Training Project

	Group Statistics						
	Gender	N	Mean	SD	t	df	p
With Classroom Management	Male	23	1.70	.559	-3.768	29.92	.001
	Female	22	2.73	1.162			
Write and Use Standards-based Learning Objectives	Male	23	1.65	.573	-2.430	43	.019
	Female	22	2.23	.973			
With Classroom and Curriculum Assessment	Male	23	2.09	.949	-.836	43	.408
	Female	22	2.36	1.255			
Integrate Academics Into My Occupational Program Area	Male	23	1.74	.619	-3.038	29.48	.005
	Female	22	2.68	1.323			
With Lesson Planning	Male	23	1.96	1.186	-1.614	43	.114
	Female	22	2.55	1.262			
Learn How to Access Instructional Materials	Male	23	1.96	.825	-2.600	36.46	.013
	Female	22	2.77	1.232			
Understand Advisory Committees	Male	23	1.78	.600	-2.478	30.22	.019
	Female	22	2.50	1.225			
Understand Career and Technical Student Organizations	Male	23	1.91	.668	-1.613	33.69	.116
	Female	22	2.36	1.136			
Understand How to Develop A Professional Development Plan	Male	23	1.83	.717	-2.149	30.93	.040
	Female	22	2.55	1.405			

Table 8. Influence of Teachers' Age on Their Perception of the WSI Teacher Training Project

	Group Statistics						
	Age	N	Mean	SD	t	df	p
With Classroom Management	22-44	29	2.14	.953	-.537	43	.594
	45 and over	16	2.31	1.195			
Write and Use Standards-based Learning Objectives	22-44	29	1.97	.823	.344	43	.733
	45 and over	16	1.88	.885			
With Classroom and Curriculum Assessment	22-44	29	2.38	1.178	1.293	43	.203
	45 and over	16	1.94	.929			
Integrate Academics Into My Occupational Program Area	22-44	29	2.21	1.114	.055	43	.956
	45 and over	16	2.19	1.167			
With Lesson Planning	22-44	29	2.52	1.379	2.390	42.96	.021
	45 and over	16	1.75	.775			
Learn How To Access Instructional Materials	22-44	29	2.45	1.213	.750	43	.457
	45 and over	16	2.19	.911			
Understand Advisory Committees	22-44	29	2.14	1.026	.041	43	.968
	45 and over	16	2.13	1.025			
Understand Career And Technical Student Organizations	22-44	29	2.10	.900	-.283	43	.779
	45 and over	16	2.19	1.047			
Understand How To Develop A Professional Development Plan	22-44	29	2.14	1.125	-.309	43	.759
	45 and over	16	2.25	1.238			

and experienced. The experienced group was composed of responses from the experienced and very experienced groups. No differences in agreement levels were found based on self-reported computer experience by the WSI survey participants. See Table 9 for more information.

Research question five sought to investigate if the teachers' experience with online education influenced their perception of the WSI teacher training project. Three groups were created: no

experience, some experience, and experienced. The experienced group was composed of responses from the experienced and very experienced groups. There were differences in agreement levels for how helpful the WSI teacher training project was in assisting with classroom and curriculum assessment based on prior online education experience ($F_{(2,19.67)} = 3.632, p = .045$). Using the Games-Howell Post-Hoc test no pairwise differences were found; however, there did appear to be more agreement for those with some experience than those with

Table 9. Influence of Teachers' Computer Experience on the Perception of the WSI Teacher Training Project

		Group Statistics						
		Computer Experience	N	Mean	SD	t	df	p
With Classroom Management	Some Experience		22	2.05	.999	-1.175	42	.247
	Experienced		22	2.41	1.054			
Write and Use Standards-based Learning Objectives	Some Experience		22	1.82	.664	-1.087	42	.283
	Experienced		22	2.09	.971			
With Classroom and Curriculum Assessment	Some Experience		22	2.14	.941	-.535	42	.595
	Experienced		22	2.32	1.287			
Integrate Academics Into My Occupational Program Area	Some Experience		22	2.00	.873	-1.204	36.21	.236
	Experienced		22	2.41	1.333			
With Lesson Planning	Some Experience		22	2.00	.926	-1.472	35.38	.150
	Experienced		22	2.55	1.471			
Learn How to Access Instructional Materials	Some Experience		22	2.05	.844	-1.795	36.15	.081
	Experienced		22	2.64	1.293			
Understand Advisory Committees	Some Experience		22	2.09	.868	-.291	42	.772
	Experienced		22	2.18	1.181			
Understand Career and Technical Student Organizations	Some Experience		22	2.18	.907	.474	42	.638
	Experienced		22	2.05	.999			
Understand How to Develop A Professional Development Plan	Some Experience		22	1.95	.899	-1.302	36.27	.201
	Experienced		22	2.41	1.368			

no experience or more extensive experience. There were differences in agreement levels for how helpful the WSI teacher training project was in assisting with lesson planning based on prior online education experience ($F_{(2,20.02)} = 4.429, p = .026$). Using the Games-Howell Post-Hoc test, those with some online education experience reported the training more useful than those who had more extensive online education experience ($p = .029$). See Table 10 for more information.

Research question six sought to investigate if the teachers' occupational area influenced their perception of the WSI teacher training project. Of the 46 respondents, 20 were in health sciences and the other categories had very few respondents. Statistical testing was not pursued due to the low number of responses in the categories.

Discussion

Before this study was conducted, little was known about the perceptions of teachers who participated in the WSI teacher training project during the 2011-2012 academic year. This study yielded information that indicated the training project was helpful to the teachers. Teachers strongly agreed (or agreed) that the WSI teacher training project was helpful with classroom management 71.1% ($n = 45$), writing and using standards-based objectives 80.0% ($n = 45$), classroom and curriculum assessment 75.5% ($n = 45$), integrating academics into

occupational program areas 73.4% ($n = 45$), lesson planning 71.1% ($n = 45$), learning how to access instructional materials 66.7% ($n = 45$), understanding advisory committees 73.4% ($n = 45$), understanding career and technical student organizations 73.3% ($n = 45$), and understanding how to develop a professional development plan 77.8% ($n = 45$). The results of this study indicated that males more than females agreed that WSI teacher training helped with classroom management ($t = -3.768, df = 29.92, p = .001$), with writing and using standards-based learning objectives ($t = .2430, df = 42, p = .019$), with integrating academics into their occupational area ($t = 3.038, df = 29.48, p = .005$), with how to access instructional materials ($t = -2.600, df = 36.46, p = .013$), with understanding advisory committees ($t = -2.478, df = 30.22, p = .019$), and with understanding how to develop a professional development plan ($t = -2.149, df = 30.93, p = .040$). Teachers who were 22-44 did not find the WSI teacher training as helpful as those who were 45 years of age and over ($t = 2.390, df = 42.96, p = .021$). Teachers with some online education experience reported the training more useful than those who had more extensive online education experience ($p = .029$).

Conclusion

Prior to this study, there was a lack of information about the perceptions of Indiana WSI teachers with regard to the 2011/2012 WSI

Table 10. Influence of Teachers' Experience with Online Education on the Perception of the WSI Teacher Training Project

		Group Statistics						
		N	Mean	SD	F	df1	df2	p
With Classroom Management	No Experience	19	2.11	1.049	.965	2	42	.389
	Some Experience	16	2.06	.998				
	Experienced	10	2.60	1.075				
	Total	45	2.20	1.036				
Write and Use Standards-Based Learning Objectives	No Experience	19	1.84	.765	1.254	2	42	.296
	Some Experience	16	1.81	.655				
	Experienced	10	2.30	1.160				
	Total	45	1.93	.837				
With Classroom and Curriculum Assessment	No Experience	19	2.26	1.046	3.632	2	19.67	.045
	Some Experience	16	1.75	.577				
	Experienced	10	2.90	1.524				
	Total	45	2.22	1.106				
Integrate Academics Into My Occupational Program Area	No Experience	19	2.16	.958	1.521	2	20.82	.242
	Some Experience	16	1.88	.885				
	Experienced	10	2.80	1.549				
	Total	45	2.20	1.120				
With Lesson Planning	No Experience	19	2.00	1.106	4.429	2	20.02	.026
	Some Experience	16	1.81	.655				
	Experienced	10	3.40	1.578				
	Total	45	2.24	1.246				
Learn How to Access Instructional Materials	No Experience	19	2.32	.885	2.571	2	20.62	.101
	Some Experience	16	1.94	.854				
	Experienced	10	3.10	1.524				
	Total	45	2.36	1.111				
Understand Advisory Committees	No Experience	19	2.05	.780	.445	2	20.16	.647
	Some Experience	16	2.00	.894				
	Experienced	10	2.50	1.509				
	Total	45	2.13	1.014				
Understand Career and Technical Student Organizations	No Experience	19	2.11	.809	1.113	2	42	.338
	Some Experience	16	1.94	.854				
	Experienced	10	2.50	1.269				
	Total	45	2.13	.944				
Understand How to Develop A Professional Development Plan	No Experience	19	2.26	1.195	.723	2	19.96	.498
	Some Experience	16	1.94	.680				
	Experienced	10	2.40	1.647				
	Total	45	2.18	1.154				

teacher training project that they completed. This article yielded some new information to the knowledge base pertaining to alternative route teachers. It reported the findings of a 2012 study that showed the perceptions of alternatively licensed Indiana teachers with regard to the WSI alternative licensure training project that they participated in during the 2011/2012 academic year. Data revealed that the alternatively licensed teachers either agreed or strongly agreed that the WSI teacher training project was helpful with classroom management, using standards-based objectives, classroom and curriculum assessment, integrating academics into occupational program areas, lesson planning, learning how to access instructional materials, understanding advisory committees, understanding career and technical student organizations, and understanding how to develop a professional

development plan. As reported, some groups compared to others felt that the WSI alternative licensure training project was more helpful; however, alternative licensure appears to be helpful overall to the teachers surveyed in this small Indiana study.

Recommendations for Further Research

Future research should be conducted to ascertain the perceptions of Indiana WSI teachers with regard to future WSI teacher training projects. These perceptions could guide continued program improvement. Future studies should incorporate open-ended responses or focus groups to investigate why males more than females agree that the WSI teacher training program assisted with classroom management, writing and using standards-based learning objectives, integrating academics into an occu-

pational area, accessing instructional materials, understanding advisory committees, and understanding how to design a professional development plan. Open-ended responses also may yield insight into why teachers who were 22-44 did not find the WSI teacher training as helpful as those who were 45 years or age and over. Furthermore, these types of responses may help to gain insight into why teachers with some online education experience reported the training more useful than those who had more extensive online education experience. Replication of this study in other states is recommended to determine if there are similar issues and results in larger regions or nationally.

Dr. Edward J. Lazaros is an assistant professor in the Department of Technology at Ball State University Muncie, Indiana, and coordinator of the Master of Arts Degree in Career and Technical Education.

Dr. Samuel Cotton is an associate professor and Chairperson in the Department of Technology at Ball State University, Muncie, Indiana.

Paul B. Brown is a graduate of Ball State University, Muncie, Indiana.

References

- Briggs, J. E. (2008). *Perceptions of alternatively-licensed career and technical education teachers about teacher mentoring and teacher retention*. (Unpublished doctoral dissertation). The Ohio State University.
- Cochran, L., & Reese, S. (2007). A successful introduction into the teaching profession. *Techniques: Connection Education and Careers*, 83(1), 25-27.
- Cotton, S. E., Koch, K. R., & Harvey, M. W. (2010). Adapting school environments to special needs. *Academic Exchange Quarterly*, 14(1), 164-169.
- Cotton, S. E. (2000). Professional development needs assessment for secondary vocational and technical education teachers related to students with special needs. *Academic Exchange Quarterly*, 4(2), 33-40.
- Garcia, R., & Huseman, J. (2009). Alternative certification programs: Meeting the demand for effective teachers. *National Center for Policy Analysis, Brief analysis No. 675*.
- Heath-Camp, B., & Camp, W. G. (1990). What new teachers need to succeed. *Vocational Education Journal*, 65(4), 22-24.
- National Center for Education Information (n.d.). Alternative routes to teacher certification: and overview. Retrieved from <http://www.ncei.com/Alt-Teacher-Cert.htm>.
- Nickolich, D., Feldhaus, C., Cotton, S., Barrett, A., II, & Smallwood, J. (2010). Perceived life satisfaction of Workplace Specialist I faculty and mentors participating in a first-year STEM teacher training project. *Journal of Technology Studies*, 36(2), 41-54.
- Ruhland, S. K., & Bremer, C. D. (2002). *Alternative teacher certification procedures and professional development opportunities for career and technical education teachers*. St. Paul, MN: National Dissemination Center for Career and Technical Education.