

A CONTENT ANALYSIS: COURSEWORK FOR THE EFFECTIVE PREPARATION OF BUSINESS EDUCATION TEACHERS

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Abstract

Problem: The distribution of coursework required in undergraduate business teacher education programs had not been recently documented, and teacher preparation coursework may have an impact on the student achievement of program completers.

Research Questions: What are undergraduate business teacher education degree program credit hour requirements for expertise in business subject matter? What are undergraduate business teacher education degree program credit hour requirements for expertise in the context for teaching business subject matter? What are undergraduate business teacher education degree program credit hour requirements for expertise in instructional strategies for teaching business? What was the influence of selected institutional characteristics on required coursework in undergraduate business teacher education degree programs? **Research Method:** A qualitative content analysis technique was used to categorize data into three overarching categories and several sub-categories.

Data Collection Procedures and Analysis: Data were collected from a random sample of business teacher education programs and then analyzed to describe programs and measure the influence of selected institutional characteristics on required coursework.

Findings: On average, business teacher education programs required 128.79 semester credit hours of coursework, 35.38% in subject matter, 47.63% in contextual knowledge, and 16.80% in instructional strategy. Organizing units, program affiliation, and university type resulted in significant statistical interactions. **Conclusions/Recommendations:** Required coursework is largely misaligned with the recommendations of the National Association for Business Teacher Education; as a result, additional research should be conducted to determine the impact of required coursework on the achievement of program completers. In the interim, it is recommended that business teacher educators review their program coursework to determine the extent to which it aligns with the recommendations of the National Association for Business Teacher Education.

Background

Teacher education program curricula typically address competencies identified by national and state accreditation agencies (Council for the Accreditation of Educator Preparation, 2013). These standards provide guidance to program faculty and education institutions in developing teachers via university-level programs. However, business teacher education programs are not aligned with a specific subject area accrediting body. Instead, business teacher education

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programs respond to requirements posited by state-level agencies to include state recognized boards of regents and departments of education. Business teacher education programs are also organized within a variety of colleges, schools, and departments (Fisher & Hagler, 2012).

Teacher preparation programs lead toward certification to teach in elementary/middle/high schools and career centers. Sometimes the area of certification influences the higher education units where programs are delivered. For instance, business teacher education programs are delivered in colleges of education or in alignment with the business subject matter in colleges of business.

Business teacher education program faculty members are committed to preparing effective teachers. They recognize the need for continuous improvement through revised program requirements and coursework (Anderson, 2013). These programs were enhanced in recent years in response to a growing empirical base, changes to required teacher certification assessments (e.g., edTPA and Praxis), and shifts in program accreditation requirements (“About the Praxis Series Tests”, 2014; Council for the Accreditation of Educator Preparation, 2013; Stanford Center for Assessment, Learning, and Equity [SCALE], 2012; Wang & King, 2008). Unlike other content areas (e.g., math education), business teacher education programs are not required to adhere to specific subject area specific accrediting body (SPA) guidelines, such as the National Council of Teachers of Mathematics (2014), which is associated with math teacher education programs. As a result, however, some business teacher education programs voluntarily complied with the standards suggested by the National Association for Business Teacher Education (2010).

Review of Literature

Business teacher education programs are designed to prepare individuals to provide instruction for and about business (Fisher & Hagler, 2012). Business education, as a diverse field, continuously responds to emerging workforce development needs (Stitt-Ghodes, 2012). As a result, business teacher education coursework is dynamic and extends across a wide continuum to include both basic business (e.g. accounting, business law, and personal finance) and information technology (e.g., computer applications, graphic design, and web usability).

Research revealed that business teachers were exceptionally well prepared in business content (Schmidt, Finch, & Oliver, 1994). However, a cadre of changes has occurred in the past two decades; as a result, findings in that study are largely outdated. In addition, the study was limited to a focus on content knowledge, an important aspect—but only one piece of the larger body of knowledge and skills needed to be an effective teacher.

Conceptual Framework for Effective Instruction

Effective teaching requires teachers to be knowledgeable and skilled in three content domains: (a) subject matter, (b) instructional context, and (c) instructional strategies (Darling-Hammond & Bransford, 2005; National Association for

Business Teacher Education, 2010). Concepts revealed in the framework provide a lens to analyze the knowledge and skills needed for the delivery of effective instruction. Together, the concepts provide a framework for the development of curricula to support the preparation of business teachers.

Subject matter. Within teacher education, subject-matter knowledge is framed within pedagogical knowledge. Subject-matter knowledge is defined as “the ability to anticipate and respond to typical student patterns of understanding and misunderstanding within the [subject matter], and the ability to create multiple examples and representation of challenging topics that make the content accessible to a wide range of students” (Grossman, Schoenfeld, & Lee, 2005, p. 201). In business teacher education, subject matter competencies are met through coursework in accounting, finance, economics, marketing, management, business law, communication, and information technology (National Association for Business Teacher Education, 2010).

Monk (1994) revealed that a positive relationship existed between teachers’ coursework in subject matter and students’ academic achievement. Results of the study were not generalizable beyond teachers of mathematics, and the findings may be limited in their application to other subject matter areas (Goldhaber & Brewer, 1996). However, evidence supported that participation in formal courses in personal finance (a business education course) was the single best predictor of students’ achievement of subject matter competence (Loibl & Fisher, 2013).

Subject-matter knowledge and skill provides business teachers with an understanding and foundation for the application of business concepts. The knowledge and skills address a cadre of uses and problems in ethics, globalization, society, environment, technology, and workplace diversity (National Association for Business Teacher Education, 2010). Nonetheless, a paucity of literature exists which examines the quantity of subject matter coursework required to be an effective teacher. The National Association for Business Teacher Education (2010) proposed that half (50%) of business teacher preparation programs should be focused on subject matter competence.

Evidence is scant that clearly establishes a linkage between subject matter competence and student achievement. In fact, some evidence points towards additional competence in instructional strategy as a stronger predictor of increased student achievement than additional coursework focused on subject matter competence (Heath, 2011; Monk, 1994).

Instructional context. Instructional context is defined as the knowledge of students and their development in social contexts (Darling-Hammond & Bransford, 2005). Contextual knowledge includes courses focusing on the theoretical understanding of behavioral and cognitive development, language skill, cultural diversity, school organization, and facilities. Evidence suggests that teachers’ knowledge of contextual factors in the domain of teaching and learning is associated with students’ academic achievement (Kayne, Taylor, Tyler, & Wooten, 2011).

There was a positive link between teachers who had earned a degree in their teaching field as well as had acquired additional preparation for teaching in diverse environments (e.g., multicultural education, special education, and English language development) and effective teaching and learning practices (Wenglinsky, 2002). Enhanced coursework in contextual factors is especially important to meet the needs of diverse student populations—such as students of color—who are expected to outnumber their peers by the year 2035 (Darling-Hammond & Bransford, 2005; United States Census Bureau, 2000).

Teachers' knowledge of behavioral and cognitive development helps them address the specific needs of diverse learners and native-multimodal learners. Multimodal learning impacts the way in which students organize and retrieve knowledge (Horowitz, Darling-Hammond, & Bransford, 2005). Effective instruction requires that teachers have a strong understanding of child development and learning theory (Darling-Hammond & Bransford, 2005).

Business education programs in the middle/high school and career centers serve the needs of a growingly diverse student population. Technology has become an important teaching tool to address diverse needs (Brown & Finnell, 2013). In fact, business students have become native technology users and require a sophisticated level of technology interaction (Polkinghorne, 2014). The advent of new teaching and learning technology has an important impact on the context for teaching and learning.

The National Association for Business Teacher Education (2010) identified two areas of contextual competency: general studies and professional studies (which included both instructional strategy and context). This advent revealed a misalignment with the framework posited by Darling-Hammond and Bransford (2005), who categorized professional studies as instructional context and strategy. Overall, the Association revealed their perception that business teacher education programs should require about 33% of total coursework focused on general studies and about 17% in the area of professional studies.

Instructional strategy. Instructional strategies are identified as the tools and resources that teachers implement to convey knowledge to their learners (Draper, 2008; Orlich et. al., 2013). The strategies capitalize on unique aspects of learning theory to include social interaction and active student engagement (Han, Eom, & Sug Shin, 2013). To engage students, teachers implement active instructional strategies (e.g., problem-based and project-based) in their classrooms (Burriss, Jackson, Xi, & Steinberg, 2013).

Instructional strategies are critical in enabling students to acquire knowledge. Business educators implement a plethora of active instructional strategies (Fletcher, 2015). Skills to implement these strategies are acquired via teacher education programs and through the professional development of in-service teachers.

Summary

In the absence of an accrediting body recognized by the Council for the Accreditation of Educator Preparation (2013), business teacher education programs have little guidance beyond state regulations. Some business teacher education programs have voluntarily complied with the standards suggested by the National Association for Business Teacher Education (2010). As a result of voluntary compliance, business teacher education programs may have had considerable variances in their coursework requirements within their home states. Nonetheless, a general framework exists to support the effective preparation of teachers (Darling-Hammond & Bransford, 2005).

Evidence exists to support increased coursework in subject matter, contextual knowledge, and instructional strategies (Goldhaber & Brewer, 1996; Heath, 2011; Horowitz, Darling-Hammond, & Bransford, 2005; Kane, Taylor, Tyler, & Wooten, 2011; Loibl & Fisher, 2013; Monk, 1994; Wenglinsky, 2002). With the exception of Loibl and Fisher (2013), little guidance is given in relationship to the number of courses required or the impact of required coursework on students' academic achievement. As a result, program coursework requirements in business teacher education programs are largely left up to the discretion of individual faculty members and the influences from the programs' college of alignment.

Purpose of the Study

The purpose of the study was to gain a better understanding of the course requirements for business teacher education programs. This understanding was derived via the identification, description, and analysis of required undergraduate coursework for business teacher certification. Specifically, answers to the following questions were sought:

1. What are undergraduate business teacher education degree program credit hour requirements for expertise in business subject matter?
2. What are undergraduate business teacher education degree program credit hour requirements for expertise in the context for teaching business subject matter?
3. What are undergraduate business teacher education degree program credit hour requirements for expertise in the instructional strategies for teaching business?
4. What was the influence of selected institutional characteristics on required coursework in undergraduate business teacher education degree programs?

Method

The qualitative directed content analysis method was utilized to collect, analyze, and report data. The content analysis allowed for the directed interpretation

of data and was framed by the conceptual framework for effective instruction (knowledge of subject-matter, instructional context, and instructional strategies). This method was appropriate because undergraduate business teacher education program course requirement data were publicly available and could be accessed unobtrusively, and a conceptual framework for effective instruction had already been developed and generally agreed upon (Creswell, 2013).

Participants

The programs analyzed in this study were drawn from a national directory of business teacher education programs (Polkinghorne & Bailey, 2011). The directory was queried to determine the national population of universities that offered an undergraduate business teacher preparation program (N=174). Based upon the article by Bartlett, Kotrlik, and Higgins (2001), a minimum of 85 (36.96%) of the 230 identified programs needed to be analyzed to ensure a minimum accuracy of 95% in the statistical analysis. This level of accuracy ensured that study findings could be generalized to the larger population. Based on their suggestion, 94 (40.87%) of the identified programs were included in the random sample, which were selected based on a table of random numbers.

Instrumentation

No existing instrument was available to collect the data sought in the study. As a result, the researcher developed an instrument. The instrument was based on the literature review, specifically by the Darling-Hammond and Bransford (2005) framework, and allowed for the collection of specific program characteristics and course credit hours requirements. The instrument included three broad categories: (a) subject-matter, (b) instructional context, and (c) instructional strategies. To ensure reliability, the instrument included examples of course titles (Figure 1).

Descriptive Degree Program Coursework Instrument

Subject Matter	Contextual Knowledge	Instructional Strategies
<i>Traditional</i> Accounting Business Computation Business Law Communications Economics Entrepreneurship Finance International Business Management Marketing	<i>General Studies</i> Arts English Fitness Foreign Language Health Mathematics Perspectives Science Social Studies Wellness	<i>Theoretical</i> Curriculum Development Instructional Methods Instructional Strategies Teaching Reading
<i>Information Systems</i> Computer Hardware Computer Programming Desktop Publishing Graphic Communications Multimedia Communications Networking Systems Productivity Software	<i>Educational Studies</i> Adolescent Psychology Assessment Classroom Management Content-Area Foundations Curriculum Foundations Educational Philosophy Exceptional Students	<i>Clinical</i> Field Experiences Practicum Student Teaching Teaching Internships
<i>Options</i> Business Internships	<i>Options</i> Contextual Electives	<i>Options</i> Strategy Electives

Figure 1: Data collection instrument developed based on the review of literature which supported a conceptual framework for the effective preparation of teachers, as suggested by Darling-Hammond and Bransford (2005).

Data were numerically coded by two researchers. Coded data focused on the collection of specific credit hour requirements within the three domains under investigation. In alignment with current trends in higher education, all of the analyzed programs conveniently awarded course credits based on the semester credit hour analytic. As a result, the researcher accepted the credit hours revealed in the program requirements and did not utilize any technique to equalize based on differences in analytics (e.g., trimester, quarter hours, etc.).

Instrument reliability. Reliability in the study was established by a statistical technique where the coders simultaneously assigned program course requirement

data to the content analysis instrument. Then, the measure was established by simultaneously coding 14 degree programs, each of which were coded by both of the researchers. The collected data were then analyzed via the SPSS V.19 statistical package and subjected to testing via Krippendorfs' Alpha. The statistical test revealed a sufficient, $\alpha = 0.956$, reliability rating (Krippendorff, 2012). An alpha = .956 indicated that the instrument was reliable more than 95% of the time.

Data Analysis

Data with only two categories (e.g., NABTE affiliation) were analyzed via the t-test technique. Data with more than two categories (e.g., regional affiliation) were analyzed via the ANOVA technique. All data were analyzed to determine statistical descriptives (e.g., measures of central tendency).

Findings

Findings in this study are presented for each research question and are revealed below:

Research question #1: What are undergraduate business teacher education degree program credit hour requirements for expertise in business subject matter?

Table 1 reveals that undergraduate business teacher education programs require, on average, a total of 128.79 semester credit hours. Of those hours, 45.57 semester hours are required in subject matter knowledge. Approximately 33.67 (73.89%) of subject matter required coursework hours are concentrated in traditional business subject matter (e.g., accounting, business law, communications, and finance). In addition, undergraduate business teacher education candidates completed approximately 10.17 (22.32%) semester hours in information studies (e.g., computer applications, computer hardware, and computer applications). Other requirements included 10.17 (22.32%) semester hours in business electives (e.g. business and industry internships).

Table 1

Subject Matter Descriptives

Variable	n ¹		σ	Min	Max	% ²
Subject Matter Knowledge	94	45.57	9.77	18	74	35.38
Traditional Business	94	33.67	9.08	15	68	73.89
Information Studies	90	10.17	5.90	3	29	22.32
Other	40	4.62	2.93	1	14	10.14
Total Required Program Hours	94	128.79	9.08	111	159	100.00

Note. ¹Unequal group sizes (n) is a result of variance in program requirements across institutions (e.g., not all programs required coursework described as "other"; ²Percentages were derived as follows (1) subject matter: subject matter/total program hours, (2) traditional business: traditional business/subject matter, (3) information studies: information studies/subject matter, (4) other: other/subject matter knowledge.

Research question #2: What are undergraduate business teacher education degree program credit hour requirements for expertise in the context for teaching business subject matter?

Business teacher education programs require, on average, 61.34 semester credit hours in contextual knowledge (Table 2). Further analysis revealed that 43.64 (71.14%) of the required semester hours in contextual knowledge were concentrated in general academic studies (e.g., arts, sciences, and social studies). Business teacher education majors earn an average of 17.19 (39.39%) semester hours of total contextual credit hours in general education studies (e.g., adolescent psychology, assessment, and educational philosophy). In addition, about 10.17 (16.58%) semester credit hours are earned in other contextual electives.

Table 2
Contextual Knowledge Descriptives

Variable	n ¹		σ	Min	Max	% ²
Contextual Knowledge	94	61.34	11.14	31	104	47.63
General Studies	94	43.64	9.51	21	69	33.89
Education Studies	99	17.19	6.17	5	36	13.35
Other	20	5.60	3.65	2	15	4.35
Total Program Hours	94	128.79	9.08	111	159	100.00

Note. ¹Unequal group sizes (n) is a result of variance in program requirements across institutions (e.g., not all programs required coursework described as *other*); ²Percentages were derived as follows (1) Contextual knowledge: Contextual knowledge/total program hours, (2) General studies: General studies/contextual knowledge, (3) Education studies: Education studies/contextual knowledge, (4) Other: other/contextual knowledge.

Research question #3: What are undergraduate business teacher education degree program credit hour requirements for expertise in the instructional strategies for teaching business?

As shown in Table 3, data indicated that undergraduate business teacher education majors complete 21.63 semester credit hours in instructional strategies (e.g. theoretical and clinical studies). The programs required about 9.14 (42.26%) hours of coursework in the theoretical foundation for instructional strategies (e.g. instructional strategies, methods, and teaching reading) and 12.33 (57.00%) hours in instructional strategy-related clinical settings (e.g., student teaching, practicum, and field experiences). In addition, students completed 7.50 (34.67%) hours in other types of instructional strategy courses.

Table 3
Instructional Strategy Descriptives

Variable	n ¹		Σ	Min	Max ²	%
Instructional Strategy	94	21.63	4.98	11	36	16.80
Theoretical Studies	94	9.14	4.24	2	21	42.26
Clinical Studies	94	12.33	3.22	1	24	57.00
Other	2	7.50	6.36	3	12	34.67
Total Program Hours	94	128.79	9.08	111	159	100.00

Note. ¹Unequal group sizes (n) is a result of variance in program requirements across institutions (e.g., not all programs required coursework described as *other*); ²Percentages were derived as follows (1) Instructional strategy: Instructional strategy/total program hours, (2) Theoretical studies: Theoretical studies/instructional strategy, (3) Clinical studies: Clinical studies/instructional strategy, (4) Other: Other/Instructional strategy.

Research question #4: What was the influence of selected institutional characteristics on required coursework in undergraduate business teacher education degree programs?

Several institutional characteristic variables were collected. These variables included affiliation with the National Association for Business Teacher Education (NABTE), geographic region, institutional type (e.g., public or private), institution's Carnegie classification, and the organizing unit for the business teacher education program (e.g., colleges of education, business, technology, professional studies, or other). In cases where there were fewer than 10 cases, data were excluded from significance testing. Statistical analyses revealed only three institutional characteristics (NABTE affiliation, institutional type, and organizing unit) resulted in significant statistical interactions. Significant findings are headed by the institutional characteristic and are shown below:

NABTE affiliation. Because there were only two groups (NABTE affiliated or non-NABTE affiliated), data were analyzed via t-test to determine significance at the $p < .05$ level. Based on the analysis, institutional affiliation with NABTE significantly influenced findings. Specifically, NABTE affiliation resulted in significant interactions within subject matter knowledge and contextual knowledge. The analysis revealed that NABTE-affiliated institutions required significantly more coursework in subject matter knowledge and less coursework in contextual knowledge. Within the domain of subject matter knowledge, NABTE-affiliated institutions required more coursework in information studies. Within the domain of contextual knowledge, NABTE-affiliated institutions required significantly less coursework in general studies (Table 4).

Table 4
NABTE-Affiliation: T-test for Equality of Means

	NABTE affiliate		Non-NABTE affiliate		<i>t</i> -test
	M	SD	M	SD	
Subject-matter knowledge	48.71	9.04	44.03	9.82	2.23**
Information studies	13.33	4.16	8.58	6.02	3.89**
Traditional business	33.45	8.40	33.78	9.46	-.16
Other	3.89	2.03	5.23	3.44	-1.53
Contextual knowledge	57.48	10.33	63.23	11.12	2.41**
General studies	39.93	7.60	45.40	9.87	2.68**
Education studies	17.48	6.35	17.05	6.13	.32
Other	5.11	3.52	6.00	3.88	-.53
Instructional strategy	21.00	4.78	21.94	5.09	-.856
Theoretical studies	8.71	3.80	9.35	4.45	-.69
Clinical studies	11.81	2.93	12.59	3.34	-1.11
Other	E	E	E	E	E

Note. ** $p < .05$; E = NABTE affiliated institutions did not have any coursework coded as "other;" statistic not calculated

Institutional type (public v. private). Statistical t-test of data revealed that institutional type (e.g., private or public) significantly ($p < .05$) influenced some findings. In fact, institutional type resulted in statistical interaction within subject matter and contextual knowledge. Public universities required significantly more coursework in subject matter knowledge and in information studies. Private universities required significantly more coursework in contextual knowledge and in general studies (Table 5).

Table 5
Institutional Type: T-test for Equality of Means

	Private		Public		<i>t</i> -test
	M	SD	M	SD	
Subject-matter knowledge	43.49	9.34	47.84	9.83	2.20**
Information studies	7.80	4.67	12.64	6.07	4.24**
Traditional business	34.43	8.78	32.84	9.42	-.84
Other content	7.80	4.67	4.42	3.01	-.50
Contextual knowledge	64.22	10.72	58.19	10.85	-2.71**
General studies	46.51	9.82	40.44	8.13	-3.22**
Education studies	16.71	6.24	17.71	6.12	.78
Other	6.70	3.92	4.50	3.17	-1.38
Instructional strategy	21.18	5.40	22.11	4.50	.90
Theoretical studies	8.98	4.75	9.31	3.64	.38
Clinical studies	12.20	3.46	8.98	4.75	.39
Other	7.50	6.36	E	E	E

Note. ** $p < .05$; E = Public institutions did not include any coursework classified as "other" within the domain of "instructional strategy;" statistic not calculated

Organizing college. Overall, 88 (93.62%) of the programs were aligned in either colleges of education or business. Data from six institutions with programs housed outside the college of education or business were excluded from testing because their group size was insufficient to yield a reliable estimate. Thus, a *t*-test was administered to determine the presence of statistical interaction between programs aligned in colleges of education and colleges of business.

Programs delivered through colleges of business required significantly more coursework in subject matter knowledge though the coursework was not concentrated within any specific category. Programs in colleges of education required significantly more coursework in contextual knowledge even though the coursework was not concentrated in any specific area of contextual knowledge. Thus, programs in colleges of business required more coursework in subject matter knowledge and college of education programs required more coursework in contextual knowledge (Table 6).

Table 6
Organizing Unit: T-test for Equality of Means

	College of Business		College of Education		<i>t</i> -test
	M	SD	M	SD	
Subject-matter knowledge	48.89	8.04	44.43	9.73	-2.09**
Information studies	11.63	4.50	9.56	6.31	-1.53
Traditional business	34.30	7.84	33.67	9.55	-.30
Other content	4.07	2.92	4.96	3.07	.89
Contextual knowledge	57.22	7.89	63.18	12.04	2.36**
General studies	41.19	8.90	44.80	9.72	1.65
Education studies	15.52	5.00	17.92	6.70	1.67
Other	4.50	1.92	6.13	3.96	.79
Instructional strategy	22.63	4.74	20.94	4.97	-1.50
Theoretical studies	9.59	3.48	8.79	4.50	-.82
Clinical studies	12.59	2.47	12.10	3.54	-.66
Other	E	E	E	E	E

Note. ** $p < .05$; E = fewer than two institutions associated with colleges of business or colleges of education required coursework coded as “other” within the domain of “instructional strategy;” statistic not calculated

Discussion and Conclusions

Business teacher education programs are guided by state accreditation requirements. These programs are not accredited by specialized accrediting bodies, such as math education programs, which are often accredited by the National Council for Teachers of Mathematics (2014). Some business teacher education programs voluntarily comply with the standards suggested by the National Association for Business Teacher Education (2010).

Data in this study indicated that, in general, business teacher education programs were not aligned with the suggestions of the National Association for Business Teacher Education. In fact, the Association recommended that programs consist of about 50% of coursework focused on subject matter competency, and findings revealed that business teacher education programs require slightly less than one-third of total hours to be concentrated in subject-matter competency. This finding clearly illustrates that the average business teacher education program is not following the recommendations of the Association. In addition, the Association recommended that programs require about 33% of their coursework in the area of instructional context. This study revealed that business teacher education programs require more coursework in instructional context than suggested by the

Association. Nonetheless, institutional affiliation with NABTE resulted in some significant interactions.

Programs affiliated with NABTE require more coursework in subject matter and specifically in information studies than their non-affiliated peers. In addition, non-NABTE-affiliated programs require more coursework in the contextual knowledge domain and specifically in general studies. The impact of required coursework and whether a positive relationship forms when more subject matter coursework is required remains largely unknown; although, there is some evidence that as business teachers take more coursework in the area of personal finance, their students' personal financial achievement increases (Loibl & Fisher, 2013). This finding suggests that NABTE-affiliated institutions, which require more coursework in information studies, may produce business teacher candidates who are more effective in providing information studies and related instruction.

The majority (93.62%) of business teacher education programs are aligned within either colleges of business or colleges of education. Not surprisingly, colleges of business require significantly more coursework in subject matter than those delivered through colleges of education. The additional coursework was not concentrated with any specific category. Simply stated, graduates from colleges of business have more coursework in subject matter and less coursework in contextual knowledge. The implication for this finding in relationship to business teacher education remains largely unexplored (Schmidt, Finch, & Oliver, 1994).

Much like the significant interaction noted between programs and their college of alignment, it appears that business teacher education programs at public universities require more coursework in subject matter and specifically in information studies than their peers at private universities. Conversely, private universities require business teacher candidates to take more coursework in contextual knowledge and specifically within general studies than their peers at public universities. This is likely attributed to additional requirements in religious studies that are often associated with private religious-affiliated universities (which was the largest category of private universities in this study). The implication of this finding on student achievement in business education remains unclear (Brown & Finnell, 2013).

Recommendations

Several data points were revealed that described the overall nature of business teacher education programs. However, the impact of required coursework on student achievement remains largely uninvestigated in the context of business education. Some evidence exists, though it focuses on other content area teacher preparation (e.g., math education and science education) or within specific subjects (e.g., personal finance). While it is clear that the impact of business teacher education program coursework on the achievement of program completers is largely uninvestigated, the following recommendations are made:

Recommendations for Practice

1. Business teachers should participate in professional development that focuses on their specific subject matter (e.g., computer programming, personal finance, web page design), contextual knowledge (e.g., educational psychology, classroom management assessment), and instructional strategy (e.g., instructional methods, curriculum development) needs, because it appears additional coursework may enhance their students' academic achievement.
2. Business teacher education faculty should review their curricula to ensure required subject matter coursework aligns with the types of content being taught by their program graduates.
3. The National Association for Business Teacher Education should consider identifying as a national accrediting agency; this action would likely result in some alignment among business teacher education programs and across institutions regardless of specific institutional characteristics (e.g. organizing unit and institutional type).

Recommendations for Further Research

1. Business education researchers should consider investigating the impact of required coursework on their program graduates' classroom effectiveness.
2. Researchers should investigate the relationship, if any, between required coursework in specific subject matter (e.g. accounting, business law) on the achievement of their program graduates within the domain of specific subject matter.
3. In light of rapid changes in required coursework in teacher education programs, this study should be periodically replicated to determine changes in program requirements.
4. Research should be undertaken to examine the extent to which NABTE program suggestions relate to student achievement.

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