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Delineating Requirements, Responsibilities, and Expectations of Current Business Education Teachers

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Delineating Requirements, Responsibilities, and Expectations of Current Business Education Teachers

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Abstract

Background: A state-of-the-art literature review was conducted to gain current insights into teaching requirements for primary/kindergarten through twelfth grade business education teachers. **Purpose:** The purpose of this exploratory study was to describe the major teaching responsibilities for business education teachers as communicated through job postings with an emphasis on the increasing subjects within Science, Technology, Engineering, and Math. **Method:** Using a state-of-the-art literature review, data were analyzed using two websites that aggregate and post teaching jobs nationally. Categories were established to describe the teaching qualifications, responsibilities, and expectations of future business teachers which included broad versus specific job requirements, states that were hiring, preferred degree attainment, school type, business education subjects, and part-time versus full-time jobs. **Discussion:** There were limited job postings that were specific to the field of business education and more of a trend towards broad teaching responsibilities. More full-time jobs were requested than part-time jobs. **Conclusion:** Analyzed data also suggested which business education and S.T.E.M. courses were in-demand as communicated through job postings. Some in-demand courses included general business, Marketing, and Information Technology. Other in-demand courses categorized as STEM courses were Computer Science and Programming.
Keywords: Business education, S.T.E.M., teaching responsibilities

Introduction and Background

The field of business education requires teachers to be highly skilled and competent in a variety of business subjects. At various times, legislative polices have changed, which in turn will affect the role and expectations of business education teachers within the primary/kindergarten (P/K) through twelfth grade levels. Business education teachers, as well as school districts, are tasked with making sure that programs are currently responding to the various changes.

Post-secondary business education programs work to maintain high-quality standards to meet the challenges of today's economy. A rigorous program offered by a post-secondary provider, such as a four-year college/university, could be determined through accreditation, such as the accreditation offered by the *Council for the Educator Accreditation of Educator Preparation* (CAEP) (CAEP, 2015). Post-secondary providers ensure that high-quality standards are met through data-driven decision-making, which in turn, prepare business education teachers to meet the challenges of teaching business in the twenty-first century. These recommendations are also communicated and have been identified by the *American Association of Colleges of Teacher Education and the Partnership* [AACTE] for 21st Century Skills. According to AACTE (2010), an important interdisciplinary theme directly related to the field of business education included "Financial, Economic, Business and Entrepreneurial Literacy, e.g., knowing how to make economic choices, understanding the role of the economy in society" (p. 8).

Due to the rapidly changing landscape of the field of business education, teachers need to be aware of what school districts are seeking when it comes to teaching jobs. School districts need teachers to teach variety of subjects to be taught by business education teachers and are seeking different types of minimum degree requirements sometimes coupled with teaching experience. Business education is also highly inter-disciplinary, and the role of Science, Technology, Engineering, and Math (S.T.E.M.) subjects within business education affect which courses business education teachers will be expected teach (Sanders, 2008).

Significance of the study

This study was significant in establishing baseline data regarding the current status of job expectations, including teaching responsibilities in the fields of business education for those teachers within the primary/kindergarten through twelfth grade levels (P/K – 12). An additional area of significance is the role of S.T.E.M. course subjects in the field of business education.

Conceptual Framework

To develop an accurate reflection and current status of changing requirements and expectations for business education teachers, a state-of-the-art literature review was employed (Grant & Booth, 2009). A state-of-the-art literature review is utilized to determine the newest trends and changes in a field to get a gauge of newer developments. A state-of-the-art literature review was chosen since it would allow the researcher to gain a sense of the most current trends and developments affecting P/K – 12 grade business education teachers in regards to teaching expectations, requirements, and demands. Figure one delineates the process used to gather data as part of the research process using this type of methodology.

Figure 1. Conceptual framework of state-of-the-art literature review

Statement of the Problem

With different foci currently in place when it comes to training business education teachers (Polkinghorne, 2015), states are looking for different qualifications when it comes to hiring a business education teacher (Perry, 2011). Each state determines the qualifications for a teacher, which includes how much time is spent in both pedagogical and content area courses (Western Governor's University, n.d.). This study explores the different teaching qualifications for teaching business education, subjects requested to be taught, states that were hiring, job type, and the growing role of S.T.E.M. within business education.

Related Literature

Evolution of business education

The origin of business education and offering courses can be traced back to 1635, as casting accounts was taught in business arithmetic, which would later become known as accounting (Stitt-Gohdes, 2002). Also, during that time, school-to-work was increasing in popularity as schools wanted to make sure that students were prepared to enter the workforce through apprenticeships (Stitt-Gohdes, 2002). It is noted by Stitt-Gohdes (2002) (originally cited by Hosler, 2000) that the first courses of accounting in the form of bookkeeping were offered in a public school in Boston in 1709, in New York City in 1731, and in Philadelphia in 1733.

The Secretary's Commission on Achieving Necessary Skills [SCANS] (1991) was instrumental in determining the needed skills to prepare students for the twentieth century and beyond (Huitt, 1999; Secretary's Commission on Achieving Necessary Skills, 1991). Results of the SCANS report indicated an increasing awareness of preparing students with life-skills in order for them to meet the demands of the the workplace. The report also scrutinized how schools were preparing students to make sure that students were workplace ready in the twentieth century. This could include the role of business through preparing students in a business course using instruction related to real-world outcomes (Secretary's Commission on Achieving Necessary Skills, 1991). There has been a continual progression from a focus on basic office

and computer skills to now preparing students for competing in a global economy and a stronger focus on the role of information technology (Phillips, 1994).

Preparing business education teachers

Teacher education preparation programs began training business education teachers in Philadelphia in 1898 (Gordon, 2014). Business education teachers integrate an assortment of teaching strategies to a heterogeneous group of students enrolled in courses and programs. These instructional strategies, described as emerging, have included flipped classrooms, mobile-learning, and quest-based learning (PCBEE #94, 2014). These instructional strategies employ a student-centered approach to engage students to learn a variety of concepts and techniques directly related to business education. In addition to using a mixture of teaching strategies, it is believed that the business education curriculum should be relevant and rigorous to make sure that students understand the fundamentals of how the economy works and operates (PCBEE #95, 2014). Business education jobs include courses and subjects that are designed for a changing economy, which means that the business education curriculum must remain malleable enough to be adaptive to those changes. The policy brief #95 concludes with the impact of business education programs by stating that, "Students enrolled in business education courses are getting more than an education; they are gaining knowledge and skills essential for life" (PCBEE #99, 2014, p. 3).

Programs offered by post-secondary providers that prepare future business education teachers, as well as offer professional development for current business education teachers, must also consider adaptions to program requirements to match the needs of business and industry (Gordon, 2014). Also, these programs must equip business education teachers to incorporate a diverse set of instructional and pedagogical skills to make sure that business students are fully prepared (Gordon, 2014).

The role of business education in today's schools

Business education teachers are teaching a variety of subjects to prepare students for business and industry (Polkinghorne, 2015) with an ever-changing curriculum that is updated regularly to remain current. Some of the courses can include accounting, general business, information technology, information technology, and finance. Additionally, some of the courses are general business education courses, while other courses are more career-specific to a certain business field, such as marketing or finance (also known as career-technical) (Gordon, 2014).

Research has indicated a growing trend to use online technologies in order to deliver business education instruction. In a study conducted by Fletcher and Djajalaksana (2014), their findings revealed the usage of online methodologies including synchronous and asynchronous tools. The researchers stated that career-technical business teachers were more likely to utilize online "quizzes, discussions, collaborative projects, blogs, asynchronous and synchronous lectures, portfolios, exercises, games and simulations, social networking, and podcasts/webcasts/YouTube videos compared with agricultural, trade and industry, and health occupations teachers" (Fletcher & Djajalaksana, 2016, p.51). Online teaching tools are becoming more prevalent within business education programs, which would also indicate that business education teachers also need to be prepared to teach courses online.

According to Ainlie & Huffman (2018), businesses are experience a shortage of skilled workers with a Science, Technology, Engineering, and Math (S.T.E.M.) background. They suggested increasing experiences of secondary students and exposing them to S.T.E.M. through internships and externships. As such, S.T.E.M. has become an important focal point in today's schools when it comes to preparing students for a career in a S.T.E.M.-related field. A policy brief issued by *Policies Commission for Business and Economic Education (PCBEE)* has espoused positive support for integrating S.T.E.M. with business education. The statement identified that S.T.E.M. and business education both encourage students to use higher-order thinking skills such as critical thinking through rigorous course content provided by business education programs (PCBEE #99, 2016). Also, within S.T.E.M., subjects when integrated with business education, students also learn important skills including problem-solving and

using evidence-based thinking (West, 2012), which can be considered another important element of a business education program. STEM, and the role of S.T.E.M. subjects and skills, will continue to play an important part in the role of educating students at different grade levels (Basham, Israel, and Maynard, 2010). For the purposes of this study, S.T.E.M. focused on the subjects and disciplines as related specifically to Science, Technology, Engineering, and Math. Other subject areas, such as the Arts, were not included in the study.

The evolution of information technology and keyboarding

A focus of S.T.E.M has been the "technology" discipline. Within technology, one particular area of emphasis has been the role of programming and teaching programming at different grade levels (Code.org, 2018). Also, a study conducted by Hicks (2017) suggested that middle school was a pivotal time to offer programming to students to help them start to achieve proficiency. In a study by Burke (2016), it was further suggested that computer programming has become an increasingly popular subject in schools, and schools must decide how and when to offer different courses related to computer programming. Gardner (2014) emphasized the importance of computer programming to make sure that students are able to stay current with economic developments and have the skills and knowledge to compete globally offered through courses in computer programming. Computer programming, as well as subjects and courses offered related to computer programming, continue to be an evolving trend within public schools (Code.org, 2019; Fluck, *et al*., 2016).

Business education teachers have been responsible for teaching keyboarding traditionally at the secondary level (Rogers *et. al*, 2003). A continued change within the business education curriculum is the role of keyboarding. Some of the research has suggested that keyboarding be taught as early as fourth grade or even earlier such as kindergarten (Zeitz, 2016), however, it can be challenging to teach keyboarding at such an early age due to maturity level and teaching the mechanics of good typing. Keyboarding has served a few roles within public schools to assist students' necessary skills with typing. Some of those roles recommended the need for assisting students with increases in computational skills, improved levels of literacy levels, and preparing students for spelling tests by having them practice spelling different words (Sivin-Kachala and Bialo, 1994; Stitt-Gohdes, 2002).

Summary of literature review

The review of literature focused on the changing program requirements for P/K through twelfth grade business education programs and the evolution of technology. Post-secondary providers have been and continue to be tasked with making sure that business education teachers are fully prepared to teach an array of courses, and some of those courses can include a greater emphasis on technology such as computer science. A limited amount of literature explored how science and engineering subjects have been integrated into business education, with the literature focusing primarily on the role of math and technology. Additionally, keyboarding did play an important role in the preparation of business education teachers so that they could one day teach a course specific to keyboarding, but there has been a diminished focus on keyboarding for more advanced technology skills.

Limitations of the study

There were a few limitations for the study. First, this study only sought to explore requirements of business education teachers according to job descriptions. Findings may be limited to relevant job postings gathered during data collection and requirements may change over time. Only websites included K12jobspot and teachers-teachers were researched and included in the study to discover aggregated, nationally-posted business education job openings. Another limitation included conducting only online research for job postings. Some job postings may not have been analyzed as they may not have been posted online. This also coincides with a limitation of limited resources.

Methodology

Two objectives guided the study including: 1. To describe teaching qualifications, job responsibilities, and major expectations of business education teachers as communicated through job postings, and 2. To describe the role of S.T.E.M. subjects being requested to be taught by business education teachers. Several different categories were established to analyze the job postings which included a). states that were hiring, b). preferred degree level attainment, c). school type, d). business education subjects, e). full- or part-time, and f). broad versus specific qualifications.

Data were first analyzed to determine if the job posting communicated a job that was either broad or specific to the field. Some examples of requirements and descriptions from job posting as to how they were categorized are shown in Table 1.

Table 1.

Descriptions of broad versus specific business education job requirements copied from job postings.

Broad teaching job descriptors
"Participates with other staff members in determining and achieving school programs, goals and objectives"
"Follows department goals and course objectives as the basis of instructional planning"
"Pre-assesses student readiness for new instruction"
"Paces program through the curriculum according to student/class needs and abilities" "Matches resources, teaching strategies and assessment to the learning goals and objectives"
"Promotes a classroom environment that is safe and conducive to individualized and small group instruction, and student learning"
"Develops lesson plans and instructional materials and translates lesson plans into learning experiences so as to best utilize the available time for instruction"
"Conducts ongoing assessment of student learning, and modifies instructional methods to fit individual student's needs, including students with special needs"
"Organizes and maintains a system for accurate and complete record-keeping, grading, and reporting for all student activities, achievement and attendance as required by district procedures and applicable laws"

Overall, 233 job postings were analyzed and reviewed for content during the months of April, 2018, through August, 2018. These months were chosen since they are the time of a *greater likelihood of when job vacancies will be posted* related to teaching, according to Hart as part of the National Education Association (NEA) (Hart, 2010). Job postings were first aggregated according to specific terms related to business education. Keywords used to find job postings included "business education," "business education teacher," "business teacher," and "business instructor" using both K12jobspot.com and teachers-teachers.com. These websites were specifically chosen since they post national jobs for all content areas including business education. No international business education jobs were analyzed as they were outside the scope of this study, which is a limitation of the study. Also, vacancies were only included if they related to business education and not computer science or another field that could be considered similar. Once a job posting was located and analyzed, it was not used again from either website (to avoid duplication).

With an increased awareness of the role of S.T.E.M. within the field of education (Breiner, Harkness, Johnson, & Koehler, 2012; Sanders, 2008), the study also focused on the role of S.T.E.M.

within business education. S.TE.M. subjects were categorized using the categories per the National Science Foundation (NSF) list of S.TE.M. subject areas (National Science Foundation, 2014).

Results

Results of the study indicated the latest developments and changes in the field of business education teaching requirements. The majority of job postings were for broad job postings that were not specific to those teaching business education. Overall, there were 202 "broad" and 31 "specific" job vacancies directly related to the field of business education teaching requirements.

Nationally, 36 out of 50 states were hiring for business education jobs. Fourteen states did not list a vacancy for a business education teacher on K12jobspot.com or teachers-teachers.com. Table 3 shows the states that were hiring and the frequency of job postings per state.

Table 2.

List of states hiring and frequency.

State	Frequency	State	Frequency	State	Frequency
Alabama	2	Kentucky	3	North Dakota	1
Arizona	1	Maine	2	Ohio	15
California	1	Maryland	1	Oklahoma	5
Colorado	12	Massachusetts	1	Oregon	1
Connecticut	6	Michigan	10	Pennsylvania	10
Delaware	3	Minnesota	12	South Carolina	3
Florida	24	Montana	4	Tennessee	6
Georgia	10	Nevada	5	Texas	4
Hawaii	1	New Jersey	15	Utah	6
Idaho	1	New York	2	Virginia	10
Illinois	22	North Dakota	1	Washington	1
Indiana	21	North Carolina	8	Wisconsin	2
					1

The subjects requested to be taught by business education teachers included sixteen different subjects. Also included were subjects related to the field of S.T.E.M. Table 4 and Table 5 shows the subjects specific to business education and S.T.E.M. including frequencies of each.

Table 3.

Business Education subjects and frequency.

Subject	Frequency	Subject	Frequency

Accounting	4	Keyboarding	3
Agri-business	1	Mmgt./Leadership	1
Careers	1	Marketing	32
Computer science	8	Math	1
Entrepreneurship	6	Programming	3
Finance	10	Project design	1
General Business	201	Robotics	2
Inform. Technology	50	Work-based learning	1

Table 4.

S.T.E.M. subjects expected to be taught by business teachers.

S.T.E.M. Subject	Frequency
Computer science	9
Math	1
Programming	3
Project Design	1
Robotics	2
	n = 16

There was also variance in the grade bands, degree preference and/or teaching experience, and part-time versus full-time business education teaching jobs. The grade band of high school (*n* = 185), with a degree preference of Bachelor's degree (*n* = 73), and full-time jobs (*n* = 217) were most requested. Overall, 147 job postings did not list a preference for highest degree earned. Table 6, Table 7, and Table 8, all display data related to each category including frequencies.

Table 5.

Grade bands as indicated in the job posting

Grade Band	Frequency
Elementary	1
Middle School	40
Middle School and High School	4
High School	185
Virtual High School	2
Correctional Facility	1

Table 6.

Degree preference and/or teaching experience frequency by job posting.

Degree level	Frequency
Bachelor's Degree*	73
Bachelor's Degree and teaching experience	1
Master's Degree	6
Master's Degree and work experience	6
Not specified	147

**Note*: "Bachelor's" degree refers to any type of four-year degree and not specific to any one discipline such as business.

Findings and recommendations

Less of an emphasis on specific job responsibilities, requirements, and expectations of business education teachers.

A large majority of job postings were seeking broad teaching expectations that could be used for all grade bands/subjects at the P/K through twelfth grade level (n = 202). The findings indicated that there is less of an emphasis on job descriptions that were directly related to the business education (such as advisement of a career-technical student organization, teaching in a computer lab, or teaching discipline-specific subjects).

There are several recommendations from this finding. A first recommendation is to make job descriptions more specific to the field of business education. By making sure that the job descriptions are unique and specific to the field of business education would communicate to stakeholders the uniqueness of business education and the need for a business education program within a school. Prospective business education teachers can better identify and adapt their job documents, such as a resume and portfolio, to match the descriptions of the job.

Another recommendation would be to rely more on those familiar with the field of business education when communicating job requirements for a job vacancy. Involving an individual familiar with the field of business education, such as a current or former teacher or business teacher educator, would assist school districts in creating job postings more specific to business education. It may also help prospective teachers better locate job postings when they are searching for jobs through these unique identifiers. As noted by the research findings, business-specific courses and duties are paramount in a job posting to contrast the distinctiveness of having either a business education program or courses in a school.

Which business education subjects are considered "in demand" and the role of keyboarding

The subject of "general business" (n = 201) was the most requested subject for business education teachers to teach. Other frequently requested business education subjects included information technology (n = 50) marketing (n = 32), and finance (n = 10). This finding shows how business education teachers need to be prepared to teach a variety of subjects and which business subject(s) they may teach within a school day. The results also indicate the need to continue to espouse the benefits of business education and the role that business education programs play in the public schools with subjects that are applicable to making economic decisions and workplace readiness skills.

In a study by Crews and Bodenhamer (2009), keyboarding was listed as one of the most frequently taught courses for business education teachers. According to the results of the study, one of the less emphasized subjects included keyboarding (n = 3). This could be *due to several reasons such as the*

level at which it is taught as well as its diminished role within the field of information technology. School districts may be incorporating keyboarding skills into the discipline of information technology, which could account for the paucity of the need for keyboarding in job descriptions. Another reason for the limited focus on keyboarding as a requested discipline could be due to the usage of it being taught within the elementary level (Donica, Giroux, and Faust, 2018; Zeitz, 2016).

Several recommendations include the importance of keeping the business education program up-to-date with the changing business curriculum and when keyboarding should be offered in schools. Policy statement #95 from PCBEE examined the importance of the business education and making sure that it is relevant to the modern business environment. An up-to-date program also helps to recruit and retain students in business education programs through a curriculum that is highly engaging and responsive to current business practices. Finding a role for keyboarding, as well as other important concepts within information technology, can help a business education program remain current and prepare students to meet the demands of the business environment.

The increased demand for S.T.E.M. subjects to be taught by business education teachers

Results of the study indicated that sixteen business education jobs contained subjects related to the field of S.T.E.M. Furthermore, results indicated that business education and the field of S.T.E.M. may be becoming more integrated and that business education teachers will be teaching more STEM subjects in addition to traditional business subjects (i.e., accounting, marketing, information technology, and others).

It is recommended that research is to further consider the role of S.T.E.M. courses that could be potentially taught by business education teachers and making sure that they are fully-prepared to teach those types of courses. The increase in S.T.E.M. course offerings may also be highly beneficial to the field of business education. This is especially important as S.T.E.M. subjects continue to evolve to match the expectations of the business environment.

The role of post-secondary educational program providers and teacher educators to remain current with the changing requirements of business education.

As related to the third finding, State Boards of Education may need to adjust their program including courses taken by both undergraduate and graduate students to match courses needing to be taught by business education teachers. It is recommended that teacher educators remain current with expectations within the business education classroom. Since teacher educators have the role of making sure that students are prepared for teaching, which can include instructional decision-making and content knowledge, they are tasked with making sure that future business education teachers are prepared to teach a variety of subjects (Crew and Bodenhamer, 2009). These teacher educators will also want to make sure that future (and perhaps current) business education teachers have strong content knowledge in a vast array of subjects within business education especially with a growing trend towards S.T.E.M. subjects.

Conclusion

Results of the study indicated important updates for P/K through twelfth grade business education teachers. Some of the updates included most request business courses, highest degree level attainment, type of school, stats that were currently hiring, and the increasing role of S.T.EM. subjects. Furthermore, the results indicated that general business, high school teaching, an earned bachelor's degree, and the S.T.E.M. subject of computer science were most requested.

Areas for future research

It is suggested that further research be conducted with reference to the current status of business education teaching responsibilities including expectations and requirements. A study could further examine perceived levels of preparedness of business education teachers at the P/K-12 grade level when it

comes to teaching various subjects in business education. A quantitative, qualitative, or mixed-methods research study could further examine the role of perceived levels of preparedness and which subject areas in business education teachers feel most prepared and least prepared to teach. This could help to inform post-secondary teacher education institutions about the role of preparing business education teachers at both the undergraduate and graduate levels.

Another area of potential research to is further considered the role of S.T.E.M. being integrated into business education. The results of the study indicated a growing trend of S.T.E.M. subjects within business education such as robotics, project design, and even math. A study could examine how prepared business education teachers perceived themselves to be teaching S.T.E.M. subjects and courses. An additional area of research could also include the role of the "Arts" and examine subjects related to S.T.E.A.M. needing to be taught by business education teachers.

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