

**Demographic data of business education licensure completers over a thirteen-year period:
A longitudinal study**

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Abstract:

The purpose of this descriptive research study was to describe the demographic data of undergraduate and graduate Business Education licensure completers over a thirteen-year period, starting with the school years of 2008/2009 through the school year of 2020/2021. A further purpose of the study was to describe trends found in the demographic data and to describe how the trends impact Business Education licensure completers within the timeframe. The researchers used a non-experimental, descriptive, research design to address the research objectives (Creswell, 2012). This study was significant in that much of the data related to teaching is generalized and not specific to specialties. This research aims to provide those involved in preparing business education preservice teachers with some possible expectations as to demographics, GPA, credits, gender, and age. This information can be used to improve recruitment and program design for business education teachers

Introduction

Post-secondary programs that offer licensure in PK-12th grade Business Education produce a diverse array of future teachers across the United States. These future teachers vary among different demographic variables such as gender, age at the time of completing the licensure program, cumulative undergraduate GPA, cumulative credit hours earned, and others that are a part of a teacher's demographic background (Force & Jeffery, 2019). With an expected job outlook increase of seven percent for kindergarten and elementary school teachers (Bureau of Labor Statistics, 2021a), seven percent for middle school teachers (Bureau of Labor Statistics, 2021b), and eight percent for high school teachers from 2020–2030 (Bureau of Labor Statistics, 2021c), there will be a continued need for Business Education teachers from all grade levels to teach a variety of business and technology courses and concepts. However, an overarching question remains: *Just what are the backgrounds of those entering the teaching profession to teach Business Education courses?*

For those who do choose the teaching profession, there are two distinctive ways in which a person can obtain the needed licensure to teach Business Education at the PK–12th grade levels, including a traditional pathway and alternative pathway. There are certain requirements put in place by each state, and these requirements can vary by state (Teacher Certification Degrees, 2022b). For the traditional pathway, undergraduate and graduate students typically complete licensure requirements which include content and pedagogical courses, field experiences, licensure assessments, and a culminating student teaching experience. For the alternative

pathway, these teachers may complete similar requirements for those who enter via the traditional pathway, or there may be certain requirements that are only in-place for alternative licensure students (Teacher Certification Degrees, 2022c).

In the state of Pennsylvania, undergraduate licensure completers in Business Education must complete a traditional pathway, while graduate licensure completers can choose from either the traditional or alternative pathway. Each pathway in Pennsylvania has certain requirements that are germane to either pathway, and similarities that overlap for both pathways such as licensure assessments and field-based observations (Pennsylvania Department of Education, 2021). Business education teachers, whether they complete an undergraduate or graduate program, must be prepared to teach a wide array of courses (Jeffery, 2020), and they have a variety of backgrounds and experiences that they bring to the teaching profession. The aim of the study, as noted in the next section, is to describe the demographic backgrounds of business education students who complete all licensure requirements (and referred to as “completers”) among certain available demographic characteristics.

Purpose of the Study

The purpose of this descriptive research study was to describe the demographic data of undergraduate and graduate Business Education licensure completers over a thirteen-year period, starting with the school years of 2008/2009 through the school year of 2020/2021. A further purpose of the study was to describe trends found in the demographic data and to describe how the trends impact Business Education licensure completers within the timeframe. The study was significant in providing baseline demographic data of those who choose to complete Business Education licensure requirements at a mid-Atlantic university as an undergraduate or graduate student. An objective of the study was to describe the demographic backgrounds of licensure completers (those who complete either a traditional or alternative pathway/route) to become P/K-12th grade Business Education certified to then uncover trends among those data about the completers’ backgrounds.

Conceptual Framework

The conceptual framework for the study was based on the existing framework from a study by Zirkle et al. (2019), in which the researchers examined the demographic data of career and technical education teachers during a longitudinal period. Additionally, the researchers examined a set of longitudinal data to describe and explore teacher demographic data to address the research objectives of the study which also included teacher retention. Using the existing framework from the Zirkle et al. (2019) study, the researchers examined certain demographic variables to describe the demographic backgrounds of licensure completers specific to the field of business education during a longitudinal period, and with existing data. It should be noted that describing and exploring teacher retention was outside the scope of this study.

Review of the Literature

There are a variety of reasons why people choose to enter the teaching profession and surprisingly the time off is not one of the main motivators. Many teachers cite the desire to work with young people and make a difference as to why they chose the profession. Many teachers were positively impacted by a teacher, and this inspired them to want to do the same for others. Another reason cited as to what leads to teaching is the variety the job brings. A day in the life

of a teacher presents a variety of daily tasks, lessons and challenges. Despite the challenges faced in teaching, many who enter the profession teach because they find it fun, and it allows them to use their creativity. In addition, many who teach are passionate about the subject they teach and want to share this with their students (Marsh, 2015).

Teaching has typically been a profession that is composed primarily of females. That trend continues today, but that does not mean that males are not entering the profession. There has been a 31 percent increase of males entering the teaching profession in the public-school system. However, the considerable number of females entering the profession compared to males still makes teaching a female dominated occupation (Ingersoll et al., 2018). In addition, teaching has been labeled as attracting students that are less academically inclined. SAT and ACT scores for those graduating with a degree in education are well below those of those undergraduates in other majors (Ingersoll et al., 2018).

Teacher shortage was a problem before the COVID19 pandemic, but with additional stress faced by teachers, many are leaving the profession. The supply of qualified teachers does not meet the demand and the shortage continues to grow (Pandey, 2021). Unfortunately, the supply of new teachers is atypically low and has been declining. Teacher education enrollments dropped 35% between 2009 and 2014. In addition, student enrollment is increasing; thus, magnifying the need for even more teachers (Sutcher et al., 2016). This shortage and lack of qualified teachers had led districts to seek creative ways to find qualified teachers other than the traditional methods.

The traditional pathway to teaching usually includes obtaining an undergraduate degree in education which culminates with student teaching. Many times, it is thought that the typical education graduate can be teaching by the age of 22 or 23. However, this is only the case for about 55% of the teachers entering the profession in the United States. Nine percent of those entering the teaching profession are 40 years of age or older and 16% in their thirties with 20% in their late 20s (Aldeman, 2019). Alternative licensure pathways allow the more experienced and mature individual the opportunity to enter the teaching profession with less restrictions.

The teacher shortage coupled with an individual's desire to enter teaching later in life has led to the prevalence of alternative licensure pathways. This pathway, also known as non-traditional teacher certification, allows individuals with the desire to teach but lacking the educational background the opportunity to become certified teachers. The programs vary state by state, but most require a bachelor's degree in the area in which you are interested in teaching. There are programs that allow teachers to teach while working on coursework that can lead to a master's degree or post-graduate certificate and this can be achieved in one to two years (Teacher Certification Degrees, 2022a).

Overview of the teaching program

The mid-Atlantic university addressed in this study offers both an undergraduate and graduate degree in Business Education that provides a state teaching certificate. The undergraduate program includes classes in both business and education. The Master of Education (M.Ed.)-Business Education has three different tracks—master's degree only, master's degree with student teaching and master's degree with internship. The student teaching track is for those who want the experience of collaborating with a mentor teacher during a 16-week student teaching

placement. The Intern track is for students who are enrolled in the master's program, successfully passed the appropriate Praxis tests and have been hired as a full-time Business Education teacher.

Research Design and Methodology

The researchers used a non-experimental, descriptive, research design to help to address the objectives of the study (Creswell, 2012). To gather data for the study, several internal data sources, such as a database, were provided to the researchers with selected variables included in the data source, including gender, age at the time of graduation, GPA, and other pertinent data related to the study. The researchers then aggregated all the sources to review which variables could describe both undergraduate and graduate licensure completers, and which graduation years were included within the data sources. It was concluded that the oldest graduation year was for the 2008/2009 school year and went through the 2020/2021 school year. The researchers were able to include longitudinal data over a twelve-year period.

The variables that were included in the study were also determined to be of interest after an exhaustive literature review, and by examining a similar study that had been conducted on career and technical education completers (Zirkle et al., 2019), and using some of the same variables from a study conducted by Force & Jeffery (2019). However, this study focused only on describing the demographic data of completers who sought K-12 licensure as part of either an undergraduate or graduate Business Education program. Those completers who graduated with either an undergraduate degree in Business Education but no K-12 licensure or graduate completers who only completed an M.Ed.-only: no licensure, were excluded from the dataset and study. A delimitation of the study was only undergraduate or graduate completers who sought K-12 licensure.

Since was a descriptive research study, analysis was conducted using a quantitative analysis. Quantitative analysis included measures of central tendency and average condition functions using Microsoft Excel to describe the data and interpret it for trends, and qualitatively on certain variables, such as gender, to describe differences between undergraduate and graduate completers. A major goal of the study was to determine trends among the different types of variables in addition to describing those students who complete a Business Education program for licensure. It was fully IRB- approved (IRB# 2021-5-COB).

Results

What are the demographic data of undergraduate and graduate program completers of an approved post-secondary institution for licensure of Business Education during the school years of 2008/2009 through 2020/2021?

Demographic data were analyzed according to certain available variables between undergraduate and graduate completers who sought licensure to teach K-12 Business Education. The variables analyzed for both undergraduate and graduate licensure completers included gender, cumulative undergraduate GPA, cumulative credit hours earned at the time of graduation, age at the time of graduation, undergraduate major, and state where the completer was originally from. Variables that were also analyzed, but specific only to undergraduate licensure completers, included a declared undergraduate minor and if they completed the Honors program as part of their graduation requirements. Variables that were also analyzed, but specific only to graduate

licensure completers, included their route (student teaching or Intern) and if they were an alumnus of the university completing a second-degree program. Altogether, 66 undergraduate licensure completers and 50 graduate licensure completers were included in the study among the school years of 2008/2009 through 2020/2021. Also, 37 undergraduate licensure completers were male while 29 licensure completers were female, and 29 graduate licensure completers were male while 21 licensure completers were female.

Results indicated that undergraduate licensure completers were likely to have an average undergraduate GPA of 3.49 ($SD = 0.23$), completed 138.58 cumulative undergraduate credit hours ($SD = 13.17$), with an average age of 23 ($SD = 3.99$), and graduated during the 2008/2009 school year. Further results indicated that graduate licensure completers were likely to have an average undergraduate GPA of 3.22 ($SD = 0.47$), have an average graduate GPA of 3.83 ($SD = 0.22$) completed 130.14 cumulative undergraduate credit hours ($SD = 11.98$), and have an average age of 30 ($SD = 8.80$), and have graduated during the 2020/2021 school year. All results of the study can be found as tables in the appendices.

Table 1. Shared variables analyzed

Variable	Gender	Undergrad GPA	UG. Cred. Hrs.	Age at the time of completion	UG. Major	State
UG. Completers	Male: 37	<i>M:</i> 3.49 <i>SD:</i> 0.23	<i>M:</i> 138.58 <i>SD:</i> 13.17	<i>M:</i> 23.20 <i>SD:</i> 3.99	BE: 64 BE/Span: 1	PA: 62
	Female: 39	Median: 3.49 Mode: 3.47 Max: 3.98 Minimum: 2.98	Median: 136.00 Mode: 136.00 Max: 175 Minimum: 120	Median: 22.00 Mode: 22.00 Max: 46 Minimum: 21	BE/Econ: 1	NJ: 3 DE: 1
Grad Completers	Male = 29	<i>M:</i> 3.22 <i>SD:</i> 0.47	<i>M:</i> 130.14 <i>SD:</i> 11.98	<i>M:</i> 30.40 <i>SD:</i> 8.80	Market.: 21 Mgmt*: 13	PA: 50
	Female = 21	Median: 3.22 Mode: 3.00 Max: 3.96 Minimum: 2.35	Median: 126.00 Mode: 122.00 Max: 175 Minimum: 116	Median: 27.00 Mode: 24.00 Max: 56 Minimum: 22	Acct.: 8 Finance: 7 ITM: 4 Busin.: 1 Econ.: 1 Techn. Lead: 1 Comm. Stud.: 1 Pastoral: 1 Para. Leg. Stud: 1 Psychology: 1	

Note: “BE” stands for “Business Education”; “Market.” stands for “Marketing”; “Mgmt” stands for “Management”; “Acct.” stands for “Accounting”; “ITM” stands for “Information Technology Management”; “Busin.” stands for “General Business”; “Econ.” stands for “Economics”; “Techn. Lead” stands for “Technical Leadership”; “Comm Stud.” stands for “Communication Studies”; “Para. Leg.” stands for “Paralegal Studies”;

Note: Mgmt includes General Management (11), Sport Management (1), and Supply Chain Management (1)

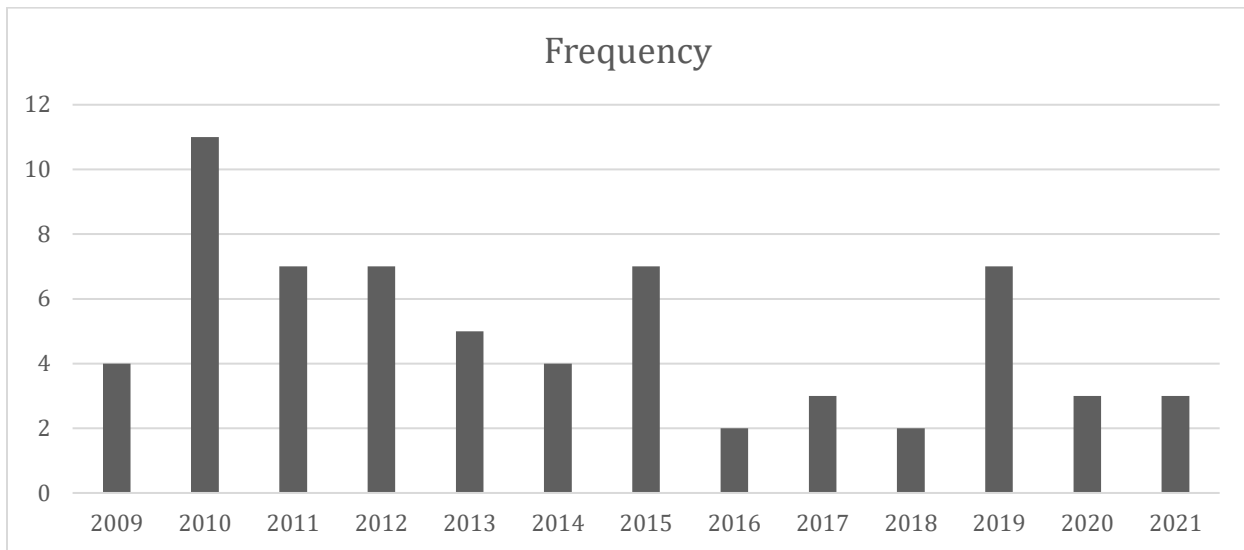
Note: Some students were double-majors, which is why the majors total may not add up to 50 (the graduate licensure completers sample size completion number); there were eight graduate licensure completers who were double-majors.

Table 2. Other variables analyzed

Variable	Honors?	Undergrad. Minor	Grad GPA	Route	Alumnus?
Undergraduate Completers	Y: 2 N: 64	None: 36 ITA: 11 Busin.: 9 Special Ed.: 3 BIS: 1 Music: 1 Leg. Stud.: 1 Spanish: 1 Accting: 1 Biology: 1			
Grad Completers			M: 3.81 SD: 0.22 Median: 3.93 Mode: 4.00 Max: 4.00 Minimum: 3.93	Stud. Teach: 43 Intern: 7	Y: 41 N: 9

Notes: “ITA” stands for “Information Technology and Analytics”; “Special Ed.” stands for “Special Education”; “BIS” stands for “Business Information Systems”; “Leg. Stud.” stands for “Legal Studies”; “Accting” stands for “Accounting”; “Stud. Teach” stands for “Student Teaching”

Graph #1. Graduation years for undergraduate licensure completers



Graph #2. Graduation years for undergraduate licensure completers

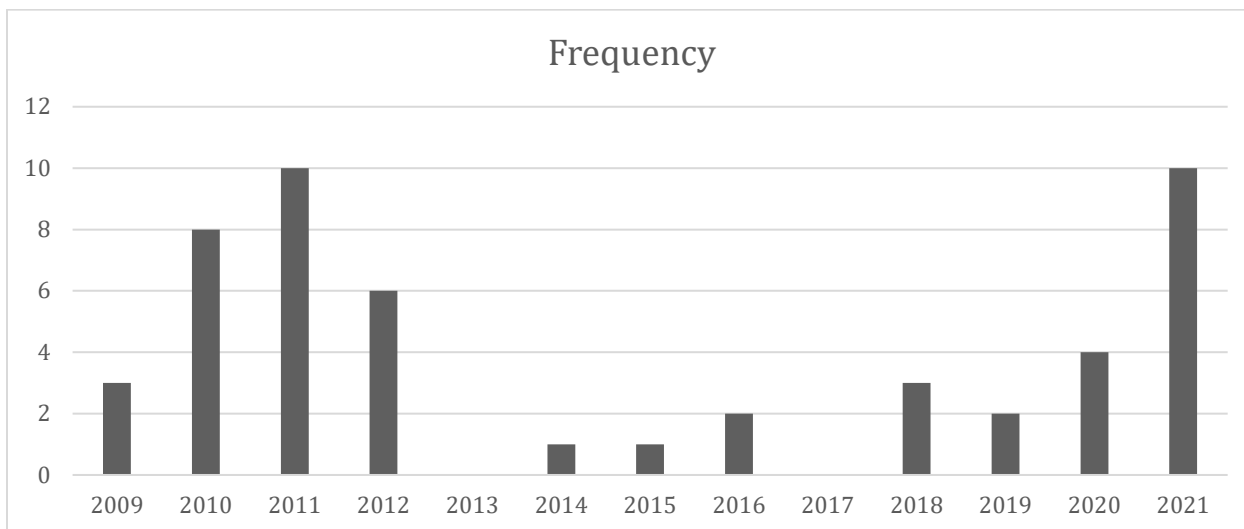


Table 5. Gender trend data

Variable	Average Gender GPA	Average Gender Grad GPA	Average Gender Credit Hrs.	Average Undergrad. Age
Undergraduate Completers	Male: 3.43		Male: 139.48	Male: 23.00
	Female: 3.55		Female: 138.10	Female: 23.00
Grad Completers	Male: 3.25	Male: 3.83	Male: 130.60	Male: 30.00
	Female: 3.24	Female: 3.85	Female: 129.88	Female: 30.00

What trends emerged from this data to describe business education completers seeking licensure during these years?

Results of the study highlighted some notable trends between undergraduate and graduate licensure completers. Some of the trends include differences in GPA between males and females, most likely graduation for both undergraduate and graduate students, and where the pipeline of new students is currently originating, among other trends.

Trend #1: Differences in gender among undergraduate GPA, graduate GPA, cumulative undergraduate hours earned, and age at the time of graduation

There was a noticeable difference between male and female undergraduate GPA for those who were undergraduate licensure completers. Male licensure program completers had on average a 3.43 GPA and female licensure program completers had on average a 3.55 GPA, indicating a difference in average GPA of 0.12.

There were no sizable differences between graduate male and female licensure completers in relation to the variable of undergraduate GPA for both undergraduate and graduate students, with males having an average of a 3.25 undergraduate GPA and females having a 3.24 undergraduate GPA. Additionally, results indicated that there were no sizable differences between male and female undergraduate and graduate licensure completers among the variables of cumulative undergraduate hours earned, age at the time of graduation, or graduate cumulative GPA.

For the variable of cumulative undergraduate hours earned, undergraduate males completed on average 139.48 credit hours and undergraduate females completed on average 138.10 credit hours, indicating a difference of 1.38 cumulative credit hours between each gender for undergraduate students. For graduate students, males completed on average 130.60 cumulative undergraduate credit hours, while females completed 129.88 credit hours on average, indicating a difference of 0.72 cumulative credit hours between male and female graduate students.

For the variable of age at the time of graduation, both male and female undergraduate students were on average the age of 23, indicating no difference in age for undergraduate males and females. Graduate students were on average the age of 30, indicating no difference in age for undergraduate males and females.

There was not much of a difference between male and females on gender and GPA. For the variable of graduate GPA, males had on average a final GPA of 3.83, while females had on average a final GPA of 3.85, indicating a difference in average GPA of 0.02.

Trend #2: Graduation years for undergraduate and graduate students

Results of the study concluded which years produced the largest number of undergraduate and graduate licensure completers starting with the 2008/2009 school year through the 2020/2021 school year. Also, for both undergraduate and graduate licensure completers, there was a greater likelihood of completing licensure requirements later in the dataset, and one occurrence of completing licensure requirements more recently in the dataset (during the 2018/2019 school year).

For the undergraduate licensure completers, there was a higher frequency of completers during the later years of the dataset 2008/2009 school year ($n = 11$), and 2010/2011 school year and 2014/2015 school year, and during the school year of 2018/2019 ($n = 7$).

For the graduate licensure completers, there was a higher likelihood of completers later in the dataset during the 2009/2010 school year ($n = 8$), 2010/2011 school year ($n = 10$), and 2011/2012 ($n = 6$), and again earlier in the dataset during the 2020/2021 school year ($n = 10$).

Trend #3: Licensure completers: Decreases in one category, an increase in another

A trend discovered in the data included a steady decrease in undergraduate licensure completers later in the dataset, and an increase in graduate licensure completers choosing to pursue the Internship route, a form of alternative licensure. For the undergraduate licensure completers, there was a trend towards a decrease in graduation rates later in the dataset starting with the 2015/2016 school year though the 2020/2021 school year, except for the 2018/2019 school year (on average, 2.6 undergraduate licensure completers not including the 2018/2019 school year).

For the graduate licensure completers, a large majority of completers choose to complete the traditional pathway (also known as the “student teaching route”), but there was a noticeable trend towards completing the Internship route (a form of alternative licensure). Throughout most of the dataset, graduate licensure completers chose to pursue the traditional pathway, however, during the 2019/2020 school year, the Internship route started showing an increase in graduate licensure completers. The results suggested that there may be a trend towards graduate students pursuing licensure requirements may pursue an alternative pathway, completing licensure completers while beginning their teaching careers in lieu of student teaching.

Findings

The results of the study provided a snapshot of the demographic background of an undergraduate licensure completer. An undergraduate licensure completer was likely to be female ($n = 39$, or 59%), have an average final undergraduate GPA of 3.49 ($SD = 0.23$), have completed an average of 138.58 credit hours ($SD = 13.17$) be an average age of 23 ($SD = 3.99$), only major in Business Education, originate from the state in which the teacher education program is located, not complete an honors type program, not pursue a minor, and have graduated during the 2009/2010 school year. This information corresponds to the literature regarding teachers in general since there are more females in the profession and traditional students complete their teaching degree by 22 to 23 years of age (Ingersoll et al., 2018; Aldeman, 2019). To a lesser extent, further analysis revealed that there were undergraduate licensure completers who double-majored in Business Education and Accounting ($n = 1$) or Business Education and Spanish ($n = 1$) and pursued a minor in Information Technology and Analytics ($n = 11$), General Business ($n = 9$), or Special Education ($n = 3$).

The results of the study provided a snapshot of the demographic background of a graduate licensure completer. A graduate licensure completer was likely to be male ($n = 29$, or 58%), have an average program and graduate GPA of 3.22 ($SD = 0.47$), have an average final graduate GPA of 3.81 ($SD = 0.22$), have completed an average of 130.14 credit hours ($SD = 11.98$), be an average age of 30 ($SD = 8.80$), have an undergraduate major of marketing ($n = 21$), originate from the state in which the teacher education program is located, completed the student teaching

route for licensure, and was not an alumnus of the university with the approved teacher education program, and have graduated during the 2010/2011 school year or during the 2020/2021 school year ($n = 10$ for each).

Limitations

The first limitation that may affect the study included a smaller sample size. It should be noted that a smaller sample size during the school years was used in the study, which may in turn affect generalizability. Also, the results of the study may only be generalizable to the population used in the study; however, the results of the study provide baseline data describing the demographic background of both undergraduate and graduate licensure completers. An overarching goal of the study was to establish baseline data regarding the demographic profile of Business Education completers and the study incorporated as many completers as possible and data that were readily available for the study.

In addition to a smaller sample size, another limitation is the scope of the study. The researchers sought to only describe demographic data and not explore implications of the results of the study. Since this was descriptive data, it would be suggested that an area of future research include further exploring implications using other forms of quantitative and qualitative methodologies. A follow up study could explore the data and further uncover deeper trends than those described in this study. No correlation analysis was performed on the data to explore relationships within the data, which is another suggested area for future research purposes.

The last limitation is the availability of variables in the study, which also served as a delimitation. An exhaustive literature review was performed before attempting the research study, and reviewing which data were maintained throughout the duration of the included school years. A limitation of the study was the availability of variables that could be included in the analysis. In future research studies, it is suggested to expand the availability of variables to include an even richer description of the demographic background of undergraduate and graduate completers. Such future demographic variables could include if a student is from another country (from an international perspective), race, income level, or marital status.

Recommendations

The demographic data and trends that were derived are most pertinent for teacher educators, program coordinators, and teacher education preparation programs that lead to Business Education licensure within the elementary, middle, and/or secondary level(s). A demographic profile described for both undergraduate and graduate licensure completers, providing data to teacher educators and program coordinators about who is most likely to enroll in a Business Education licensure program. It is recommended that teacher educators, program coordinators, and teacher education preparation programs that need licensure use the data as a guide for recruitment and retention initiatives. This can serve as a *wakeup* call for program coordinators when it comes to recruitment and retention efforts for undergraduate and graduate students interested in pursuing Business Education licensure.

Another recommendation is to continue to update these data longitudinally beyond the scope of the included school years and nationally. Tracking licensure completers will help program coordinators know key information about their students, including recruitment efforts and

preferred methods of completing a licensure program. Results of the study showed a decrease that remained steady for undergraduate licensure completers, while a steady pipeline of graduate licensure completers. This information can assist program completers with gauging recruitment efforts for undergraduate licensure completers and making program adjustments, if needed, for graduate licensure completers. Tracking the data can also continue to uncover trend data, which may change as we get closer to 2030 and beyond.

A third recommendation is to continue to actively recruit, in states in which this is an option, personnel from business and industry who would be willing to enter the teaching profession immediately as a lateral-entry teacher. This recommendation also echoes the findings of a study by Shuls & Ritter (2013), about purposefully aiming recruitment efforts towards teachers who may prefer certain route types. It was further suggested by Shuls & Ritter (2013) that some teachers could be recruited to teach certain grades levels, such as a traditional pathway for teachers who tutor elementary-aged students, and an alternative pathway for teachers who tutor secondary-aged students.

Conclusions

For graduate licensure completers, there was a noticeable increase in those pursuing licensure requirements through the Internship route, which is a form of alternative licensure (Pennsylvania Department of Education, 2021). Some studies have found that alternative licensure completers, originating from the field of career and technical education, are just as prepared for teaching as those who completed a traditional licensure pathway (Nye, et al., 2004; Shuls & Trivitt 2015; Stronge et al. 2011). The findings would suggest that graduate students may want to pursue a form of alternative licensure as lateral-entry teachers to enter the class. For vacant P/K-12 Business Education positions that may otherwise go unfilled, alternative licensure in lieu of a traditional pathway may be more desirable to fill positions.

It can be concluded from the results of the study that although a majority of undergraduate licensure completers opted not to pursue a minor, however, for those licensure completers who did complete a minor, the most popular minor was Information Technology Management (or Information Technology and Analytics) ($n = 11$), followed by General Business ($n = 9$), and Special Education ($n = 3$). There were also some undergraduate licensure completers who completed a major not associated with business or education, such as Music, Spanish, and Biology ($n = 1$ for all). This conclusion suggests that undergraduate business minors, when selecting a minor, generally prefer minors that would most likely not be housed in the College of Business or College of Education, with some pursuing a minor that is directly associated with either College.

It can be concluded from the results of the study which undergraduate major was most popular for graduate licensure completers. The results suggested that the major of Marketing ($n = 21$) was the most popular undergraduate major, followed by Management ($n = 13$), Finance ($n = 8$), and Accounting ($n = 7$). Other majors that were pursued by licensure completers as an undergraduate student, who would not be housed in the College of Business or College of Education, included Technical Leadership, Pastoral Studies, Paralegal Studies, Communication Studies, and Psychology ($n = 1$ for all). It was also indicated that eight graduate licensure completers chose to double-major as an undergraduate student. This study was significant in that much of the data related to teaching is generalized and not specific to specialties. This research

aims to provide those involved in preparing business education preservice teachers with some expectations as to demographics, GPA, credits, gender, and age. This information can help to improve recruitment and program design.

Final thoughts/Areas for future research

The results of the study provide an overview snapshot of Business Education completers from a university in north-central Atlantic region. This study was important to establish baseline data about the background of current and future business education teachers, and to start to communicate important and available demographics to stakeholders. The conclusions and recommendations help to shine a light on *who* is choosing to enter the teaching profession, with an emphasis on the field of Business Education teachers. It is also suggested that future studies focus on other variables, and perhaps even an international focus, to continue to describe the demographic backgrounds of business education teachers. Other institutions that offer degree and/or licensure programs in Business Education programs should continue to explore and even replicate this type of study to further learn more insights about the demographic backgrounds of this important field in education. Furthermore, it may be beneficial to understand *why* individuals are entering the field of business education. This study indicated an increase in graduate enrollment and decrease in undergraduate enrollment. In addition, graduates who enter the profession seem to be those with a marketing background. Understanding *why* an individual selects business education may lead to more successful recruitment efforts.

References

- Aldman, C. (2019). At what age do teachers start teaching? *TeacherPensions.org*.
<https://www.teacherpensions.org/blog/what-age-do-teachers-start-teaching>
- Bureau of Labor Statistics. (2021a). *Kindergarten and elementary school teachers*.
<https://www.bls.gov/ooh/education-training-and-library/kindergarten-and-elementary-school-teachers.htm>
- Bureau of Labor Statistics. (2021b). *Middle school teachers*. <https://www.bls.gov/ooh/education-training-and-library/middle-school-teachers.htm>
- Bureau of Labor Statistics. (2021c). *High school teachers*. <https://www.bls.gov/ooh/education-training-and-library/high-school-teachers.htm>
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and Evaluating quantitative and qualitative research*. Pearson Education.
- Force, C., & Jeffery, J. (2019). Exploring the relationship among cumulative credit hours earned, cumulative grade point average, and age at the time of testing on the Praxis II test scores for business education students. *Journal of Research in Business Education*, 60(1), 25-36.
- Ingersoll, R. M., Merrill, E., Stuckey, D., & Collins, G. (2018). Seven trends: The transformation of the teaching force—Updated October 2018.
https://repository.upenn.edu/cpre_researchreports/108/
- Jeffery, J. (2020). Delineating requirements, responsibilities, and expectations of current business education teachers. *Online Journal of Workforce Development and Education*, 10(1), 1-13. <https://opensiuc.lib.siu.edu/ojwed/vol10/iss1/1/>
- Marsh, S. (2015). Five top reasons people become teachers – and why they quit. *The Guardian*.
<https://www.theguardian.com/teacher-network/2015/jan/27/five-top-reasons-teachers-join-and-quit>

- Nye, B., Konstantopoulos, S., & Hedges, L. V. (2004). How large are teacher effects? *Educational evaluation and policy analysis*, 26(3), 237-257.
- Pandey, E. (2021). America's teacher shortage will outlast the pandemic. *Axios*.
<https://www.axios.com/teacher-labor-shortage-outlast-pandemic-d0953fec-115a-4d19-82a9-6fed552f29f9.html>
- Pennsylvania Department of Education. (2021). *Intern program - Alternative Route*.
<https://www.education.pa.gov/Educators/Certification/BecomeAnEducator/CertificationPathways/Pages/CPIntern.aspx>
- Shuls, J. V., & Trivitt, J. R. (2015). Teacher effectiveness: An analysis of licensure screens. *Educational Policy*, 29(4), 645-675.
https://journals.sagepub.com/doi/pdf/10.1177/0895904813510777?casa_token=MS5tCzc uNqUAAAAA%3A3nzkvWtBVueFW9pbHFD-cvL-FMwNQ8giUdqDHUCEy1-3jlo1Duyj2uVY6FdEosfkW41jbHyfoXCE&
- Shuls, J. V., & Ritter, G. W. (2013). Teacher preparation not an either-or. *Phi Delta Kappan*, 94(7), 28-32.
https://journals.sagepub.com/doi/full/10.1177/003172171309400712?casa_token=lttYTd vPdHYAAAAA:3Iji2GGoyILfhOH8_-aASv7TuajCHGtt8_Vpye2hyHGKq8qd0r-iIgCzxRKF3MzBKywYKwL0hXYa
- Stronge & Associates (2013). Stronge teacher evaluation system: A validation report., *Strong & Associates Educational Consulting, LLC*.
http://www.cesa6.org/effectiveness_project/Validation-Report-of-Stronge-Evaluation-System.pdf
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S. Learning Policy Institute.
<https://learningpolicyinstitute.org/product/coming-crisis-teaching>
- Teacher Certification Degrees. (2022a). *Alternative teacher certification guide*.
<https://www.teachercertificationdegrees.com/alternative/>
- Teacher Certification Degrees. (2022b). *Business teacher career guide*.
<https://www.teachercertificationdegrees.com/careers/business-teacher/>
- Teacher Certification Degrees. (2022c). *The beginners guide on how to become a teacher*.
<https://www.teachercertificationdegrees.com/become/>
- Zirkle, C., Jeffery, J., & Schrewe, L. (2019). A longitudinal study of alternatively licensed career-technical teachers. *Career and Technical Education Research*, 44(1), 23-47.
<https://doi.org/10.5328/cter44.1.1>