

ELEMENTARY TEACHER PREPAREDNESS IN SPECIAL EDUCATION IN TEXAS

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Abstract

Researchers have reported preservice teachers are not as prepared for inclusive classrooms as they desire to be. The purpose of this exploratory study was to analyze the special education coursework of Texas preservice elementary teachers completing EC-6 core subjects certificates at university preparation programs. Using a classical content analysis with the largest 19 teacher preparation programs, most preservice teachers completed one special education course, which was focused on the content theme of instruction. Future studies are needed to understand the course objectives and field-based experiences offered to preservice teachers at universities and alternative preparation programs, which will help teacher educators prepare teacher candidates who are competent with students with special needs, addressing the theme of this journal, Teacher Educators Can!

Keywords: teacher preparation, special education, university preparation

According to a Texas Education Agency survey of novice teachers collected during the 2018-2019 school year, only 12% of teachers responded as being *well prepared* to work with special education students in the general education setting (Texas Education Agency, 2019a). Teacher educators play a critical role in preparing elementary general educators to instruct all students. Students with disabilities should spend their day in the least restrictive environment, being a part of the general education class to the greatest extent possible (Individuals with Disabilities Education Act [IDEA], 2004). With more students receiving special education services in the general education classroom, general education teachers play a critical role in providing services (Barton-Arwood & Da Fonte, 2017; Gilmour & Wehby, 2020). Texas Educator Preparation Programs (EPPs), including universities follow Teacher Certification Standards (2018), detailed through the Texas Administrative Code §235.13. These standards do not require special education coursework for preservice teachers seeking to obtain an elementary core content

certification (i.e., EC-6 core subjects). However, teachers with preservice instruction and experience working with students with special needs hold more positive views of inclusion and are more likely to adjust their instruction to adequately provide services for students with special needs (Sokal et al., 2013; Swain et al., 2012). Related to this journal's theme of "Teacher Educators Can," the purpose of this exploratory study was to analyze the special education coursework preservice teachers are required to complete at Texas university EPPs.

Review of the Literature

In a 2021 annual report from the National Center for Education Statistics, 7.3 million students were receiving services through the IDEA, representing about 14% of all students enrolled in school during the 2019-2020 school year. In Texas that same year, only 10.7% of students enrolled in school received special education services through the IDEA (Texas Education Agency, 2020). Of students receiving special education services, a larger number were receiving those services in the general

education setting. By 2009, nearly 57% of all students receiving special education services were spending 80% or more of their time in the general education setting (Data Accountability Center, 2009). IDEA (2004) increased access to the general education curriculum for all students. This movement has correlated with an increase in the number of students receiving services in general education and an increase in the amount of time they spend in the general education setting (Sokal et al., 2013; Swain et al., 2012).

Texas EPPs prepare candidates to become teachers in the early childhood (EC) through Grade 12 setting (Texas Education Agency, 2021). The state of Texas has multiple avenues for teaching preparation: traditional universities, alternative certification programs, out-of-state certifications, and post-baccalaureate certifications (Texas Education Agency, 2021). For the elementary candidate earning the EC-6 core subjects certificate, Texas EPPs are not required to have a course specific to the education of students receiving special education services but are required to include special education content in their coursework (Texas Administrative Code, 2021).

Teacher perceptions of inclusion vary, often based on their prior experiences. A common belief regarding inclusion is that simply placing students with disabilities in a general education setting would suffice as inclusion, disregarding the needs and services that should accompany a placement (Hornby & Kauffman, 2020). Inclusion, however, is a broader term for equity in education, an effort to provide tiered interventions and supports that allow all students an opportunity to be successful in the general education classroom (Sailor et al., 2018). In recent studies, teachers have reported students with disabilities benefit from time in the general education setting but those teachers do not feel sufficiently prepared to provide those services adequately (Park & Yu, 2020; Swain et al., 2012; Texas Education Agency, 2020). General education teachers in the elementary setting provide students instruction in the core content areas. If students with disabilities are receiving much of their time in the general education setting from their general education teacher, how do instructors, school leaders, and staff developers prepare general education teachers to better understand special education, the process for identification, implementation of services, and the legalities regarding special education?

In a national review of university programs, researchers reported that preservice teachers were not

prepared for inclusive classrooms, lacking knowledge in evidence-based practices, response to intervention (Sailor et al., 2018), and co-teaching systems (Harvey et al., 2010). Researchers concluded that there was a need for continued research on preservice programs. Because preservice teachers in Texas are not required to take a course dedicated to special education and because novice teachers in Texas have reported being inadequately prepared to educate students with disabilities in the general education classroom, we sought to understand how EPPs in Texas prepare preservice general education teachers for working in inclusive classrooms. The purpose of this study was to analyze the coursework that preservice teachers in the state of Texas complete at universities before receiving their teaching certification in EC-6 core subjects.

Conceptual Framework of the Study

The framework for this study was not a theory but rather the state guidelines for Texas from the Texas Education Agency and the State Board for Educator Certification. The Texas Administrative Code outlines the required coursework for elementary preservice teachers. Universities must provide a minimum of 200 hours of coursework (Southern Association of Colleges and Schools Commission on Colleges, 2018). Within those 200 hours, a minimum of 30 hours must be field-based at an elementary school. The Texas Administrative Code, as described in Rule §228.35, outlines areas preservice teachers must demonstrate proficiency. Specific language in these areas that relate to special education include diverse learners and differentiated instruction (Texas Administrative Code, TX. Stat. §228.35, 2021). After the current study was conducted, the State Board for Educator Certification added language to Texas Education Code addressing educator preparation regarding special education. Specifically, the proposed amendments address the need for teacher candidates to understand disability categories, plan for instructions for students with disabilities, and use evidence-based practices that include co-teaching models, accommodations, modifications, behavior intervention, progress monitoring, and response to intervention (State Board for Educator Certification, 2022).

To become certified as an early childhood to sixth (EC-6) grade core subjects teacher in the state of Texas, preservice teachers need to have (a) earned a bachelor's degree from an accredited institution, (b) completed an EPP, (c) passed certification exams, (d) submitted a state application, and (e) completed fingerprinting (Texas

Education Agency, 2021). Using these requirements from the State Board of Educator Certification, we sought to analyze the coursework required by Texas EPPs at traditional universities with a focus on preparation to serve students with disabilities in general education to the greatest extent possible per IDEA (2004).

Method

To analyze the coursework of preservice teachers at universities, we utilized a classical content analysis (Krippendorff, 2004) with 19 university-EPPs in Texas. Previous researchers have used similar techniques to examine the quality of educational programs in higher education (e.g., Bustamante & Combs, 2011; Hess & Kelly, 2007). In this section, we describe the sample selection, data collection, and analysis used in this qualitative analysis.

Sample

Using publicly available data from the Texas Education Agency, we examined the number of EC-6 core subjects certifications earned in a six-year period. We created a spreadsheet to analyze the data from universities or traditional settings ($n = 66$). We chose to focus on universities instead of alternative programs because almost 51% of all EC-6 core subjects certifications (the largest group) were awarded from universities and this group had the most consistent course information in the form of course catalogs and semester credit hours. From there, we chose to focus on the largest programs, which represented nearly 75% of earned certificates from university EPPs or about 38% of the total certificates in one academic year. These 19 university-based programs represented 3,227 EC-6 core subjects certifications as shown in Table 1. The remaining 47 university programs issued 25% of EC-6 core subjects certifications. We reviewed coursework delivered at the universities before admission to the EPP and after. Although there was a change in the EC3 and Grades 4-8 certificate to the EC6, there was no change in content requirements related to special education (Teacher Certification Standards, 2018). In a recent survey conducted by the Texas Education Agency (2019a), only 12% of new teachers reported feeling *well prepared*. These 2019 survey results were the most recent results available at the time of this study. Participants for this TEA study were novice teachers at the end of their first year of teaching. All participants held an EC-6 core subjects certification and represented a diverse group of Texas EPPs

including universities and alternative certification programs. For that reason, we selected the 2017-2018 certificate information because this was the academic year when the teachers included in the survey results completed their certification programs.

Table 1
Teaching Certificates Issued in 2018 from Texas EPPs

Texas EPPs	Certificates awarded	% of total
Largest 19 university programs in this study	3,227	38.00%
Other 47 university programs	1,101	12.96%
Alternative certification programs	4,047	47.65%
Other (out of state, PB)	118	1.39%
Total	8,493	100.00%

Data Collection

After reviewing the course catalogs of universities and their teacher certification degree plans, we decided to concentrate on EC-6 core subjects degree programs only. This analysis included bachelor's degrees in elementary education, interdisciplinary studies, and early childhood through sixth-grade core subjects. These degree programs prepare preservice teachers for taking the EC-6 core subjects certification exam and completion of these courses does not guarantee the certification.

Using a standard data collection form, we collected degree plan information from university course catalogs including course titles, course descriptions, and credit hours offered before and after admission into an EPP at the respective university. We recorded the university course titles, the course descriptions, and credit hours. We were able to locate most programs for the 2017-2018 school year. For the five universities that did not have the 2017-2018 course catalogs available through their archives, current course catalogs were used.

Data Analysis

We analyzed data using Krippendorff's (2004) classical content analysis to distinguish common themes or patterns in the course titles and descriptions. We also utilized Onwuegbuzie and Combs' (2010) concept of cross-over mixed analysis (e.g., mixing qualitative and quantitative data). These concepts and techniques provided a method for analyzing patterns in the text and making inferences from those patterns in a systematic way (Krippendorff, 2004).

In the first phase of data analysis, we looked at major course requirements for students seeking an EC-6 core subjects certification. Next, we analyzed the required coursework by looking at the titles of courses and descriptions in the course catalogs. Using the course catalogs, we determined the number of required courses that involve special education, exceptional learners, or language consistent with special education. In the next phase, we analyzed the language used to describe the courses to determine the purposes of the courses. Noticing that some programs offered two courses and some offered only one, we compared these courses and programs using a cross-over mixed analysis. In addition, we used constant comparison (Glaser & Strauss, 1967) and horizontalization (Moustakas, 1994) to address trustworthiness and inter-coder agreement.

Findings

Required Credit Hours of EPPs

A minimum of 120 credit hours, the equivalent of a bachelor's degree, were required for Texas universities (Southern Association of Colleges and Schools Commission on Colleges, 2018). The number of credit hours for the 19 largest universities ranged from 120 to 126 with a mean of 123.10 credit hours and a mode of 123 credit hours, as shown in Table 2. These total hours reflected the completion of an undergraduate or bachelor's degree in education that prepares students for the EC-6 core subjects certification examination.

Table 2

Special Education (SPED) Course Requirements from the Largest Texas EPPs in 2018

University	Total graduates	Required credit hours	SPED courses	SPED credit hours
University 1	349	125	1	3
University 2	317	123	2	6

University 3	253	123	2	6
University 4	231	126	2	6
University 5	200	126	2	6
University 6	193	125	2	6
University 7	181	123	2	6
University 8	155	124	0-1*	0-3
University 9	149	123	1	3
University 10	148	124	1	3
University 11	144	120	1	3
University 12	142	121	1	3
University 13	135	125	1	3
University 14	126	120	1	3
University 15	108	123	2	6
University 16	107	124	2	6
University 17	98	122	1	3
University 18	97	120	2	6
University 19	94	122	2	6
Total	3,227		28	

*course was optional and not counted in total

Required Special Education Credit Hours

Of the 19 universities reviewed, 10 universities required two courses regarding special education, as shown in Table 2. Of the remaining nine universities, eight required one course, and one university allowed for one optional special education course. The universities requiring two courses did not have more overall required hours than universities with one special education course. There was no observable relationship between the number of required special education courses and total hours for degree completion.

Special Education Course Titles in Texas EPPs

For the 19 largest universities, 28 courses were identified as relating to special education. In course titles, the most frequently occurring word was *exceptionality* ($n = 11$) with 41% of all course titles using the term, as shown in Table 3. Other common words were *special education* ($n = 5$), *disability(disabilities)* ($n = 3$), *special populations* ($n = 3$), and *inclusion* ($n = 2$). Of the 28 courses analyzed, 89% of course titles contained *special education* or a closely related term (i.e., *exceptionality*, *disability*, *special population*, *inclusion*). For the universities requiring one course, most included the terms *introduction* or *survey* in their title. Of the 28 courses reviewed, only six specifically addressed *inclusion* in their title and/or description. Four

courses addressing inclusion were from universities requiring two courses.

Table 3
Content Analysis of Key Words in Course Titles and Course Descriptions

Key Words	Course Titles	Course Descriptions
Exceptional/ities	11	15
Special education	5	18
Disability/ies	3	13
Law, legal, or legislation	0	12
Special populations	3	2
Literacy	3	8
Inclusion or inclusive	2	6
Field experience or field-based or fieldwork	0	7
Curriculum	0	4
Collaboration	0	3
Diverse/ity	1	2
Dyslexia	0	2
Differentiation	0	2

Content Analysis of Course Descriptions

Next, we analyzed course descriptions for keywords and content themes. As shown in Table 3, the term *special*

education was used the most or 18 times in 11 course descriptions. Closely related was the term *exceptionality* (*exceptionalities*) appearing 15 times in 12 course descriptions. Other terms frequently used in course descriptions were *disability* (*disabilities*) (13 times), and *law, legal, or legislation* (12 times).

To understand the content strands presented in each course, we coded the course descriptions for content and reduced the codes to three themes based on the purpose of the course: instruction, identification, and law, as shown in Table 4. Course descriptions could have more than one theme. For this study, the theme of *instruction* related to descriptions of teaching and strategies when working with students with special needs. *Identification* was coded to course descriptions referring to the process of identifying students for special education eligibility and the creation of a student’s Individualized Education Plan (IEP) including services, schedules, and accommodations. *Law* was defined as referring to the history of special education, laws regarding special education, and legislation that drives special education policy (IDEA, 2004; Texas Administrative Code). Of the 28 courses, 17 courses or 61% of course descriptions had an instructional focus. There were 13 course descriptions or 46% that highlighted the identification process and 12 course descriptions or 43% that contained information about special education law and legislation. Eleven of the 28 courses had two or three themes present.

Table 4*Content Analysis of 28 Special Education Courses in Texas EPPs*

Course Content Theme	Description of Theme	Frequency
Instruction	Description mentions teaching methods, differentiation, behavior management, assessments, and instructional strategies for students receiving special education services	17
Identification	Description mentions characteristics of students with special needs and the identification of these students	13
Law	Description mentions special education law, history, rights of students, and legislation	12

Of the 28 course descriptions, 17 of these courses had one theme and 11 of these single-themed courses were focused on instruction, as shown in Tables 5 and 6. Eight of 28 courses covered two themes and three courses covered the three themes of instruction, identification, and law. An example course description that contained all three themes was titled “Special Education Services for Students in General and Special Education Settings.” The significant statements related to the themes of identification, instruction, and law are underlined in the course description:

This course covers the definitions and characteristics of the various exceptionalities; accommodations made for students within the general education setting; and federal mandates regarding services, instruction, curriculum, and inclusion within the least restrictive environment. (University 14 Academic Catalog, Special Education Courses)

Comparison of Preparation Programs with One Course versus Two Courses

Of the 19 largest universities identified for this study, 10 universities required two courses relating to special education as shown in Table 5. For these two-course programs, the mean total program credit hours was 123.5. For the 20 courses offered at the 10 universities with two-course requirements, seven courses were dually classified in themes of instruction, identification, or law. Of the 10 universities requiring two courses, five universities covered the three themes between their two courses, meaning graduates from these programs could have received information about instruction, identification, and laws for special education. Five programs offered one of the two courses as an introduction to special populations and/or exceptional learners. Three of the 10 programs had a special population and/or exceptional learners’ course and a course on behavior management. Two of these 10 programs offered two courses regarding exceptional learners, inclusion, diverse learners, and disabilities.

Table 5*Course Content Themes for Programs with Two Courses in Special Education (SPED)*

University Program	SPED Course 1			SPED Course 2		
	Instr.	Ident.	Law	Instr.	Ident.	Law
University 2	S			S		
University 3		T	T	S		
University 4	X	X	X	S		
University 5	S			S		
University 6		T	T	T	T	
University 7		T	T	S		
University 15		S		S		
University 16		S		S		
University 18			S	S		
University 19	T		T	T	T	

Note: S = single theme, T = two themes, X = three themes

As shown in Table 6, eight university programs required one course focused on special education. One program had an optional course for special education and was not shown in Table 6. For these programs requiring only one course, the mean of required credit hours was 123 (compared to 123.5 for two-course programs). Of these eight courses, two covered three themes in the one course offered. On the other hand, four courses were single-themed. Teachers in these programs might be receiving instruction related to only one theme about special education (i.e., instruction, identification, or law).

Table 6*Content Themes for Programs with One Course in Special Education*

University Program	Instruction	Identification	Law
University 1	S		
University 9		T	T
University 10			S
University 11		S	
University 12		T	T
University 13	X	X	X
University 14	X	X	X
University 17			S

Note: S = single theme, T = two themes, X = three themes

Discussion

The purpose of this study was to analyze the coursework preservice teachers in the state of Texas completed at university EPPs before receiving their EC-6 core subjects teaching certifications. We wanted to understand the preparation program's focus on special education because researchers have documented concerns with teacher preparedness in special education (Harvey et al., 2010; Park & Yu, 2020; Sailor et al., 2018; Texas Education Agency, 2020). Building on the literature about concerns with teacher preparation, we asked what the largest EPP programs in Texas were offering preservice teachers about special education.

In a previous report (Government Accountability Office, 2009), deans and chairs of 303 colleges of education across the United States documented their concerns about how teachers were being prepared to teach students identified as needing special education and English language services. The Government Accountability Office study was conducted in four states including Texas. More than 10 years ago, deans and chairs acknowledged that although they were offering at least one course in special education, there was a need to better prepare preservice teachers. These college educational leaders identified the two most common barriers as not having enough credit hours to offer additional courses and a lack of faculty with experience in inclusive education (Government Accountability Office, 2009). As we noted in the present study, there was little variation in the number of

total credit hours required by Texas programs, ranging from 120 to 126 credit hours. Perhaps college leaders understand that they cannot add additional hours to degree plans and remain competitive. Like the Government Accountability Office's (2009) report, most programs in our study offered one or two courses related to special education. Ten programs in our study offered two courses in special education and we believe this was a promising trend in better preparing preservice teachers.

With a desire to understand the content of these 28 courses offered by 19 university EPPs, we used content analysis of titles and descriptions. Course titles often capture the essence of a course and descriptions can provide clues about the content. In the title analysis, the term *exceptional* was used most often (11 times) in describing special education coursework for teacher candidates. *Exceptional* was first used by the Council for Exceptional Children (2022) in its creation in 1922 and appears to have replaced other terms in these titles such as disability. Other common terms used to title courses included *special education* ($n = 5$) and *disability* (*disabilities*, $n = 3$). A common theme we discovered in reviewing course titles and course descriptions is that terms relating to special education were more likely to be present in the description of the course rather than in the title. For example, the term *special education* was present 18 times in course descriptions but was only present in five course titles. All the 28 courses reviewed were specific to special education or exceptional learners. We recommend programs continue to use special education terms to title courses, as shown in Table 3.

In this analysis, we wanted to know what most candidates prepared by Texas universities were learning about special education. We reviewed the coursework of 19 universities representing 75% of university-based EPPs. From this sample, we can conclude that most Texas university EPP candidates had a course related to the instruction of students with special needs in the general education classroom. It appears that preparation programs understand the focus on inclusion and are trying to equip future teachers with the knowledge and skills to meet these needs. From a review of the course titles and descriptions, it appears universities are offering coursework about special education, but course descriptions vary in terms of content themes. In this study, most of the courses were single-focused, meaning they described content related only to instruction, identification, or legal issues for special education. Assuming that all three themes are necessary for

general education teachers, we believe universities should review their courses, content, and descriptions. We believe the literature supports the addition of more special education coursework, but we understand that universities cannot increase total degree hours and remain competitive and affordable. For this reason, we recommend EPP faculty examine their curricula to determine (a) if they can offer at least two courses in special education and (b) how instruction related to special education could be increased in other courses.

With the prevalence of inclusive education and increasing students' access to the general education curriculum, there were limited courses focused on inclusion and/or collaboration between general education and special education teachers, as described in the course descriptions. We believe more attention is needed to this theme of inclusion in course descriptions.

Promising were the 10 universities requiring at least two courses in special education and the handful of universities offering courses covering three content strands of instruction, identification, and law. Given the declining retention rate of first-year teachers (Texas Education Agency, 2019b) and the recommendations of previous researchers, more preparation in special education is needed for preservice teachers. As mentioned in the conceptual framework, the State Board for Educator Certification (2022) recently amended language addressing educator preparation and special education. Specifically, the proposed amendments address the need for teacher candidates to receive "instruction regarding students with disabilities, the use of proactive instructional planning techniques, and evidence-based inclusive instructional practices" (State Board for Educator Certification, 2022, p. 27). These revisions mirror the themes in our study of identification and instruction. A future study like the current study could be conducted to examine these proposed changes in preparation standards.

As with any study, there are limitations. We assumed university websites were up to date and course descriptions contained key concepts, with instructors teaching content planned from these course descriptions. We realize there are limitations in these assumptions. Researchers in future studies could collect course syllabi, compare course objectives, and analyze field-based activities designed to prepare candidates in areas of special education. Using a different approach, researchers could collect data from graduates of EPPs to determine if there is a relationship

between the number of special education courses taken and evidence of preparation for serving students with special needs in the general education setting.

In addition, we only looked at a portion of EPPs in Texas in one academic year (representing 3,200 certificates out of 8,000). In 2018, over 4,000 certificates were earned by candidates attending alternative providers. In future studies, researchers could explore the content and amount of special education offered in alternative programs, although we recognize challenges with data collection. With universities, we were able to compare semester credit hours and publicly accessible course catalogs to examine special education topics. With less standardization and transparency among alternative programs, data collection could be problematic. However, given the lower retention rates of Texas teachers certified by alternative programs compared to those from university EPPs (Texas Education Agency, 2019b), these studies are warranted.

Conclusions

Calling for more research of U.S. university-based teacher preparation programs, researchers have reported that preservice teachers were not prepared for inclusive classrooms (Sailor et al., 2018; Texas Education Agency,

2019a). Further, elementary preservice teachers in Texas are not required to complete a special education course or courses, rather EPPs are required to include special education content in their coursework (Teacher Certification Standards, 2018). The amount and content can vary at the discretion of each program.

Teachers who have completed courses and worked with students with special needs in field-based experiences hold more positive views of inclusion and are more likely to adjust their instruction to provide services for students with special needs (Sokal et al., 2013). With more students receiving special education services in the general education classroom, general education teachers play a critical role in providing these services (Gilmour & Wehby, 2020). With the recent amendments in code related to educating students with special needs, Texas' State Board for Educator Certification (2022) appears to be in the process of addressing some of these concerns. We predict EPPs will act in the coming academic year by revising courses or content to address these changes. As such, Teacher Educators Can prepare candidates who are effective in working with students with disabilities.

References

- Barton-Arwood, S. M., & Da Fonte, M. A. (2017). Collaboration of general and special education teachers: Perspectives and strategies. *Intervention in School and Clinic, 53*(2), 99-106. <https://doi.org/10.1177/1053451217693370>
- Bustamante, R. M., & Combs, J. P. (2011). Research courses in education leadership programs: Relevance in an era of accountability. *International Journal of Education Policy and Leadership, 6*(3). <http://www.ijeppl.org>
- Council for Exceptional Children. (2022). *Our founding and history*. <https://www.exceptionalchildren.org/about-us>
- Data Accountability Center. (2009). *Table 2-2: Students ages 6 through 21 served under IDEA, Part B, by disability category, educational environment, and state: Fall 2007*. https://www.ideadata.org/TABLES31ST/AR_2-2.xls
- Gilmour, A., & Wehby, J. (2020). The association between teaching students with disabilities and teacher turnover. *Journal of Educational Psychology, 112*(5), 1042-1060. <https://psycnet.apa.org/doiLanding?doi=10.1037%2Fedu0000394>
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine.
- Government Accountability Office. (2009). *Multiple federal education offices support teacher preparation for instructing students with disabilities and English language learners, but systematic departmentwide coordination could enhance this assistance*. (GAO Publication No. 09-573). U.S. Government Printing Office. <https://www.gao.gov/products/gao-09-573>
- Harvey, M., Bauserman, A., Merbler, J., & Yssel, N. (2010). Preservice teacher preparation for inclusion: An exploration of higher education teacher-training institutions. *Remedial and Special Education, 31*(1), 24-33. <http://doi.org/10.1177/0741932508324397>
- Hess, F. M., & Kelly, A. P. (2007). Learning to lead: What gets taught in principal-preparation programs. *Teachers College Record, 109*, 294-274. <https://eric.ed.gov/?id=EJ820425>
- Hornby, G., & Kauffman, J. (2020). Inclusive version versus special education reality. *Education Sciences, 10*(258), 1-13. <https://doi.org/10.3390/educi10090258>
- Individuals with Disabilities Education Act, 20 U.S.C. § Sec. 300.114 (2004)
- Krippendorff, K. (2004). *Content Analysis: An Introduction to its methodology* (2nd ed.). Sage.
- Moustakas, C. (1994). *Phenomenological research methods*. Sage. <https://dx.doi.org/10.4135/9781412995658>
- National Center for Education Statistics. (2021). *Condition of education: Annual report: Students with disabilities*. <https://nces.ed.gov/programs/coe/indicator/egg>
- Onwuegbuzie, A. J., & Combs, J. P. (2010). Emergent data analysis techniques in mixed methods research: A synthesis. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (3rd ed., pp. 397-430). Sage. **Error! Hyperlink reference not valid.**
- Park, H., & Yu, S. Y. (2020). Early childhood pre-service teachers' attitude development toward the inclusion of children with disabilities. *Early Childhood Education Journal, 48*, 497-506. <https://doi.org/10.1007/s10643-020-01017-9>
- Sailor, W., McCart, A., & Choi, J. H. (2018). Reconceptualizing inclusive education through multi-tiered system of support. *Inclusion, 6*(1), 3-18. <https://doi.org/10.1352/2326-6988-6.1.3>
- Southern Association of Colleges and Schools Commission on Colleges. (2020). *Resource annual for the principles of accreditation: Foundations for quality enhancement*. (3rd ed.). Author. <https://sacscoc.org/app/uploads/2019/08/2018PrinciplesOfAccreditation.pdf>
- Sokal, L., Funk-Unrau, S., & Woloshyn, D. (2013). How important is practicum to pre-service teacher development for inclusive teaching? Effects on efficacy in classroom management. *Alberta Journal of Educational Research, 59*(2), 285-298. <https://eric.ed.gov/?id=EJ1028041>
- Swain, K., Nordness, P., & Leader-Jassen, E. (2012). Changes in preservice teacher attitudes toward inclusion. *Preventing School Failure 56*(2), 75-81. <https://eric.ed.gov/?id=EJ958604>
- State Board for Educator Certification. (2022). *Item 8: Adoption of proposed amendments to 19 TAC Chapter 228, Requirements for Educator Preparation Programs, §228.2, Definitions, §228.10, Approval Process, §228.30, Educator Preparation Curriculum, and §228.35, Preparation Program Coursework and/or Training*. <https://tea.texas.gov/sites/default/files/feb-agenda-item-8.pdf>
- Texas Administrative Code, TX. Stat. §153.1011 (2021). [https://texreg.sos.state.tx.us/public/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=19&pt=2&ch=153&rl=1011#:~:text=\(1\)%20Beginning%20teacher%2D%2DA,which%20the%20teacher%20is%20assigned.&text=The%20term%20does%20not%20include.or%20a%20full%2Dtime%20administrator.](https://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=19&pt=2&ch=153&rl=1011#:~:text=(1)%20Beginning%20teacher%2D%2DA,which%20the%20teacher%20is%20assigned.&text=The%20term%20does%20not%20include.or%20a%20full%2Dtime%20administrator.)
- Texas Administrative Code, TX. Stat. §228.35 (2021). [https://texreg.sos.state.tx.us/public/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=19&pt=7&ch=228&rl=35](https://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=19&pt=7&ch=228&rl=35) Teacher Certification Standards, 19 T.A.C. § 235.21 (2018). <https://tea.texas.gov/about-tea/laws-and-rules/sbec-rules-tac/sbec-tac-currently-in-effect/19-tac-chapter-235>
- Texas Education Agency. (2019a). *New teacher satisfaction survey*. <https://tea4avcastro.tea.state.tx.us/ELQ/educatorprepdashboard/indicator5.html>
- Texas Education Agency. (2019b). *Teacher retention by route: 2014-2018*. <https://tea.texas.gov/sites/default/files/Teacher%20Retention%20by%20Route%202014-2018.pdf>
- Texas Education Agency. (2020). *Enrollment in Texas public schools, 2019-20*. (Document No. GE20 601 12). Author. https://tea.texas.gov/sites/default/files/enroll_2019-20.pdf
- Texas Education Agency. (2021). *Becoming a classroom teacher in Texas*. <https://tea.texas.gov/texas-educators/certification/initial-certification/becoming-a-classroom-teacher-in-texas>