# Adjustments of Elementary Music Instruction for Students with Disabilities: A Pilot Study

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Elementary music specialists teach all students in all grades at their schools, which requires the preparation of a variety of lessons simultaneously. As a result of seeing 100% of the student population, elementary music teachers host more students with disabilities than a general classroom teacher would in their class. Depending on the severity of students' disabilities, some students require alterations to general music lessons. In this study, we surveyed regional elementary music teachers (N = 15) to discover what disabilities were prevalent in their classes and if activities were adjusted. By examining the characteristics of the disabilities listed in the Individuals with Disabilities Education Act, we split disabilities into three groups: physical, cognitive, and emotional and behavioral disabilities. We surveyed elementary music educators on the prevalence of disabilities in their classrooms, to what degree educators adjusted their instruction for those students, and whether growth was seen in those students through musical instruction. Results revealed that all educators tailored their instruction in some way to serve students with disabilities. Educators mostly adjusted in the planning beforehand and while teaching their students. The most overall growth (musical, academic, and social) was seen in students with emotional and behavioral disabilities. Further research is needed in elementary music curriculum adaptation and modification, including pre-service and in-service music teacher training in working with students with disabilities.

Since the Education for All Handicapped Children Act (EAHCA) in 1975, students with disabilities have received increasing support and interactions through the American public school system. In 1990, EACHA was changed to the Individuals with Disabilities Education Act (IDEA) and was amended twice (1997, 2004) to provide appropriate education to students in their least restrictive environment. In addition, IDEA ensures that *all* children deserve safe schools, and educators should have adept resources for their students (Kauffman et al., 2017). Disabilities listed under categories in IDEA are autism, deaf-blindness, deafness, emotional disturbance, hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, speech-language impairment, traumatic brain injury, and visual impairment (IDEA, 2004). By examining the disabilities' characteristics, disabilities fall into three groups: physical, cognitive, and emotional and behavioral disabilities (see Table 1) (Kauffman et al., 2017).

Table 1	
Disabilities Categorized by Characteristics (Kauffman et al., 20	017)

Physical Disabilities	Cognitive Disabilities	Emotional and Behavioral Disabilities
Visual impairment	Autism spectrum disorder	Autism spectrum disorder
Deafness	Specific learning disability	Emotional disturbance
Deaf-blindness	Intellectual disability	Multiple disabilities
Orthopedic impairment	Traumatic brain injury	
Speech language impairment	Multiple disabilities	
Multiple disabilities		

Note. Due to the nature of some disabilities, certain disabilities may appear in more than one characteristic group.

Over the years, public school music educators have experienced an increase in students with disabilities in their classrooms, especially elementary music teachers who teach 100% of the student population in a school (Hoffer, 2017).

Most research in music education on this topic focuses on teacher and music student attitudes, perceptions, and preparedness for teaching. Findings supported continued growth in K-12 teachers' attitudes and perceptions of teaching students with disabilities (Allan, 2022; Jones, 2015). Even though elementary music teachers are more likely to host students with various disabilities, relatively few studies focus on elementary music teachers' attitudes and perceptions toward teaching students with disabilities (Grimsby, 2020b; Scott et al., 2007). Grimsby (2020a) and Majerus and Taylor (2020) interviewed elementary music teachers and focused on the collaborative opportunities and needs between paraprofessionals and music teachers. Draper's (2021) findings further supported Grimsby (2020a) and Majerus and Taylor (2020) and reinforced the need for increased collaboration among music teachers, families, administration, and the special education team. Hammel and Hourigan (2017) agreed that collaboration should expand beyond the music teacher and paraprofessionals and that teachers should possess a positive attitude toward these students. Specifically, they stated success in teaching students with special needs requires an openness to working with members of a team, an inclusive philosophy and attitude, and "a great deal of time and effort as we seek to provide each student with what he or she needs to have the opportunity to succeed" (p. 98).

Regardless of teaching level or scenario, research findings revealed music teachers consistently lack training, knowledge, and resources on disabilities and teaching students with disabilities. Research showed this is the case for pre-service and in-service teachers (Allen, 2022; Hammel & Hourigan, 2017; Jones, 2015). Research involving fieldwork, coursework, or service-learning opportunities working with students with disabilities reflected an increase in pre-service teachers' attitude, knowledge, and confidence in teaching these students (Bartolome, 2013; Colwell &

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Thompson, 2000; Hammel, 1999; Hourigan, 2007, 2009; Reynolds et al., 2005; Salvador, 2010; VanWeelden & Whipple, 2005). Hammel and Hourigan (2017) provided two challenges for universities: music-specific special education coursework and fieldwork opportunities. First, college professors lack experience and expertise in teaching students with disabilities. Second, there is little to no room for additional coursework in music education degree requirements and accreditation standards.

Despite the need for increased pre-service training, the opportunity for professional development for in-service teachers is available and effective (Allen, 2022; Hammel & Hourigan, 2017; Jones, 2015). McCord and Watts (2010) found informal peer training on students with disabilities as the most common among surveyed general music, band, choir, and orchestra teachers. While there are often fewer music-specific professional development sessions, in-service teachers benefit from any training on special education (Cooper, 1999; Grimsby, 2020b; Linsenmeier, 2004; VanWeelden & Meehan, 2016).

To create the least restrictive environment for students with disabilities, teachers must adapt, accommodate, or modify materials, space, time, and instruction.

McCord and Watts (2010) surveyed general music, band, choir, and string teachers and found that 85% of music teachers adapted goals and objectives for students with disabilities; however, only 9% of surveyed teachers felt competent in their skills to do so. According to Grimsby (2018), accommodations "allow students to learn the same material...with additional supports in place" (p. 382). She shared that modifications alter the material for the student to show understanding differently from their peers. Hammel (2017) recommended four "overarching teaching techniques to consider when adapting curricula. These four techniques include modality, pacing, size, and color" (p. 8). Few studies assess elementary music teachers' knowledge of what types of disabilities are in their classrooms and if and when adaptations occur in classes with these students. Knowing the prevalence of disabilities in elementary music classrooms and if and when teachers make adjustments for students with disabilities can guide administrators and researchers on specific professional development training for elementary music teachers, thus increasing the quality of music education for students with disabilities.

The purpose of this study was to identify types of disabilities in elementary music classrooms in the central Texas region and identify if and when lesson adjustments occurred for these students. Research questions include:

- 1. What are the most frequent disabilities seen by elementary music teachers in the central Texas region?
- 2. Are teachers more likely to plan exclusively ahead of time for adaptations, adjust instruction while teaching, or perform a combination of planning ahead of instruction and adjusting during instruction based upon the three categories of disabilities?
- 3. To what degree, if any, do teachers adapt instruction based upon the three categories of disabilities?
- 4. Do elementary music teachers see students' academic, musical, and/or social growth in each category of disabilities?

### Method

# **Participants**

Participants (N = 15) were certified elementary music teachers in Texas attending a regional Texas Orff-Schulwerk workshop. Each participant was a certified elementary music teacher in Texas. Participants' years of teaching experience ranged from 1 to 16 (M = 5.4, SD = 4.14).

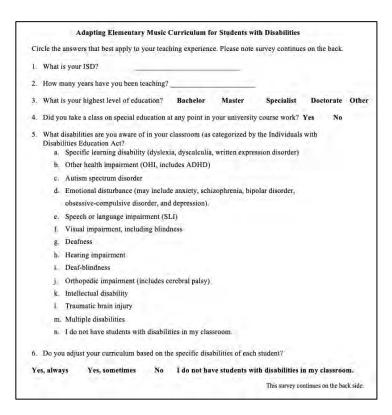
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Surveyed educators were from five local school districts in central Texas. Five participants had earned a master's degree (n = 5). Only five educators (n = 5) reported taking a special education course during college.

#### Procedure

During a break in the workshop, attendees were informed of the descriptive research study's purpose and invited to participate. Participants completed the survey on paper or through the online survey program questionpro.com. Paper surveys were collected. These responses were entered into the online system and aggregated with the online survey data. Survey questions included teaching experience, the prevalence of disabilities in their classrooms, and lesson modifications for students with disabilities (see Figure 1). The survey had 21 questions based on content validated by literature. Survey questions were screened, reworded, and vetted by a former elementary music teacher. The survey was divided into four sections: demographic and general information, physical disabilities questioning, cognitive disabilities questioning, and emotional and behavioral questioning. For each disability group, there were questions about the population of students with disabilities in their classroom, possible frequency and degree of adjustments, and growth seen in students through musical instruction. Questions were kept consistent between each group of disabilities to collect thorough and congruous information. Participants had unlimited time to complete the survey and were given a sticker as compensation. Participants finished the survey within 10 minutes.

Figure 1
Survey Given to Educators



Physical Disabilities				
Physical disabilities can range f	rom orthopedic, casts, w	heelchairs, limb differe	nces, blindnes	s, deafness, etc.
7. Do you have students w	ith physical disabilities i	n your classroom?	Yes	No
Regarding students with or adjust while teaching		e you more likely to plan	n ahead of time	e for modifications
Plan ahead of ti	me Adjust while teac	hing Both plan a	nd modify	
9. On average, how much	do you modify activities	for students with physic	cal disabilities	?
Eliminate activi	ty Greatly modify	Slightly modify	Do not mo	dify
10. Have you seen growth in	students with physical	disabilities? Yes	No	
11. In what areas, do you se	e growth in these studen	ts with physical disabili	ties?	
Musical Academi	c Social	Other		_
Cognitive Disabilities  Cognitive disabilities can include	le autism, speech langua	ge impairments, brain ii	njury, develop	mentally delay, etc.
12. Do you have students w	ith cognitive disabilities	in your classroom?	Yes	No
<ol><li>Regarding students with or adjust while teaching</li></ol>		re you more likely to pla	an ahead of tin	ne for modifications
Plan ahead of ti	me Adjust while teac	hing Both plan a	nd modify	
14. On average, how much	do you modify activities	for students with cognit	tive disabilitie	s?
Eliminate activi	ty Greatly modify	Slightly modify	Do not mo	dify
15. Have you seen growth in	students with cognitive	disabilities? Yes	No	
16. In what areas, do you se	e growth in these studen	ts with cognitive disabil	ities?	
Musical Academi	c Social	Other		_
			This survey c	ontinues on the next page.

	Behavioral Disabil				
Emotional and be	ehavioral disabilitie	es can include anxiet	y, bipolar disorder, dep	ression, OCD, ODD,	, ADHD,
17. Do you h	ave students with e	motional or behavio	ral disabilities in your o	classroom? Yes	No
	g students with emo while teaching?	otional or behavioral	, are you more likely to	plan ahead of time t	for modif
P	an ahead of time	Adjust while teac	hing Both plan	and modify	
19. On avera	ge, how much do ye	ou modify activities	for students with emoti	ional or behavioral di	isabilities
E	liminate activity	Greatly modify	Slightly modify	Do not modify	
20. Have you	seen growth in stu	dents with emotiona	l or behavioral disabili	ties? Yes	No
21. In what a	reas, do you see gro	owth in these studen	ts with emotional or be	havioral disabilities?	
Musical	Academic	Social	Other		

# Results

The number of educators with each IDEA disability category in their classrooms varied (see Table 2). The disabilities with the highest frequencies were other health impairment (N=15), autism spectrum disorder (n=14), emotional disturbance (n=14), and specific learning disability (n=13). Following in prevalence were speech-language impairment (n=11), intellectual disability (n=10), multiple disabilities (n=9), hearing impairment (n=8), and orthopedic impairment (n=8). The least

common disabilities were visual impairment (n=6), deafness (n=3), traumatic brain injury (n=3), and deaf/blindness (n=0).

Table 2

Prevalence of Disabilities in Surveyed Educators' Classrooms

Disability	Number of educators (n)
Other health impairment	15
Autism spectrum disorder	14
Emotional disturbance	14
Specific learning disability	13
Speech language impairment	11
Intellectual disability	10
Multiple disabilities	9
Hearing impairment	8
Orthopedic impairment	8
Visual impairment	6
Deafness	3
Traumatic brain injury	3
Deaf-blindness	0

Regarding adjustment of lessons as a whole, 40% of educators (n=6) answered they *always* tailored their teaching based on the specific disabilities of each student, while the rest (n=6) answered they *sometimes* did. Of the educators who had students with physical disabilities (n=11), a majority of participants (n=7) slightly adjusted their activities while the rest of the participants (n=4) greatly adjusted their activities. Most educators (n=7) reported planning beforehand *and* while teaching students with physical disabilities. The remaining educators (n=4) adjusted *solely* while teaching. No educators answered that they only planned ahead without any changes while teaching. When assessing their students, almost all educators of students with physical disabilities (n=10) saw growth in their students. The most cited form of growth seen was social (n=10), followed by musical (n=8), and academic (n=2).

Of the educators of students with cognitive disabilities (n=14), seven reported greatly adjusting their activities, while the other seven slightly adjusted their activities. Most of these educators altered their lessons by planning beforehand and while teaching (n=9). The others adjusted while teaching (n=4) and solely by planning beforehand for adjustments (n=1). Nearly all educators (n=13) saw growth in students with cognitive disabilities. The most growth reported was musical growth (n=13), followed by social growth (n=11) and academic growth (n=6).

All participants (N=15) taught students with emotional and behavioral disabilities. Most educators (n=13) slightly adjusted lesson activities, while the rest (n=2) greatly adjusted activities. Most educators (n=9) planned alterations just before teaching and while teaching. The remaining educators (n=6) only adjusted while teaching. Regarding growth in students with emotional and behavioral disabilities, all educators saw social growth (n=13) as the most common, while growth (n=11) closely followed, and academic growth (n=6) was the least common.

#### Discussion

The educators in this study represented a variety of educational backgrounds, teaching experiences, and prevalence of students with disabilities in their classrooms. Only one-third of surveyed teachers (n=5) took a course on students with disabilities in their educator preparation programs. This finding aligns with existing research (Allan, 2022; Jones, 2015); furthermore, Allan's (2022) analysis of existing literature found not much had changed in preservice coursework on exceptional learners from 1999 to 2010 (Hammel, 1999; Salvador, 2010).

There was not a survey question asking where teachers received their degrees or if they were certified through traditional or alternative means. Because five educators took a course on students with disabilities, perhaps many of the surveyed teachers were certified in Texas or received alternative certification. In Texas, Educator Preparation Programs (EPP) must embed special education topics into existing coursework. Teachers who were certified through Texas EPP or alternative means likely received information on students with disabilities throughout their coursework. The central Texas region surveyed for this study includes a military base and R1 university, which can bring working spouses certified outside Texas. This may contribute to the five music teachers who took an undergraduate special education course.

Of the educators with master's degrees (n=5), only three completed a special education course. The area of graduate studies and students with disabilities is recent and growing, with results suggesting positive perceptions, increased confidence, and increased knowledge and skill in working with this population after completing a course or field experience (Culp & Salvador, 2021; Davila, 2013; Smith & Wilson, 1999). Further research is needed in graduate music education programs that offer or require courses for students with exceptionalities.

To answer the first research question regarding the most frequent disabilities seen by elementary music teachers in the central Texas region, we surveyed teachers (N=15) at a regional workshop. Table 2 reveals the prevalence of disabilities in surveyed teachers' classrooms, with cognitive and emotional and behavioral disabilities being the most common. This finding aligns with McCord and Watts (2010) and Frisque et al. (1994), who found that cognitive and emotional and behavioral disabilities are the most common in music teachers' classrooms.

The second and third research questions sought to answer if teachers were more likely to plan solely ahead of time for adjustments, tailor instruction while teaching, or perform a combination of planning ahead of instruction and adjusting during instruction. These questions also assessed how much alteration were done based upon the three categories of disabilities. To answer these questions, we surveyed educators on whether alterations occur for the three categories of disabilities (physical, cognitive, and emotional and behavioral). Overall, all educators adjust instruction for students with disabilities, and most changes are made beforehand and while teaching. This aligns with McCord and Watts (2010), who also found that most surveyed educators adapt their instruction, goals, and objectives at some level for students with disabilities.

Only 11 of the surveyed educators taught students with physical disabilities, and most educators (n=7) slightly adjusted their activities while the rest (n=4) greatly changed their

activities. Survey results also indicated that most alterations (n=7) for students with disabilities were made before students arrived and while teaching. The remaining educators (n=4) made changes exclusively while teaching. Results suggest that teachers provide an informal diagnostic assessment for students with physical disabilities entering the music room. Grimsby (2018) stated, "Students with a physical/orthopedic disability may or may not have additional learning disabilities" (p. 390). Because the severity of any disability ranges, many educators may not adjust for the day's lesson. Perhaps teachers who plan beforehand and while teaching try to accommodate assistive devices, such as wheelchairs, walkers, and canes. Of the educators who slightly adjusted their lesson activities (n=7), only four answered that they implemented lesson alterations during planning and while teaching. The remainder responded that they *only* adjust while teaching. How and when educators make alterations is an area of further research.

Half of the educators (n=7) who answered they taught students with cognitive disabilities (n=14) admitted to adjusting their activities greatly. In contrast, the other half of educators indicated that they only slightly adjusted their activities. In addition, results suggest that most alterations (n=9) were made before student arrival and while teaching. The remaining educators indicated they primarily adjust while teaching (n=4) or solely before student arrival (n=1). A factor to consider regarding the level of changes made by educators is the severity of each disability, ranging from mild, moderate, severe, and profound (Grimsby, 2018). Hammel (2017) explained that adjustments for cognitive disabilities may be related to pacing and presentation of materials. Students might require repetition of material, learn better from a different presentation modality (visual, aural, or kinesthetic), or struggle with reproducing and synthesizing material. Educators might find some restructuring more effective in their planning or more effective while teaching. Student responses to different accommodations may also vary due to the severity of their disability. This is an area of further research.

All surveyed educators taught students with behavioral and emotional disabilities. Almost all educators (n=13) slightly adjusted their activities, while the remaining educators (n=2) greatly adjusted their activities. Results show that most educators (n=9) altered their activities before student arrival and while teaching. The remaining educators (n=6) answered that they made changes solely while teaching. While Chen (2007) found that teachers had positive results planning in light of students' behavioral characteristics, behavioral and emotional disabilities have an unpredictable, multilayered nature that may make planning beforehand tricky or even futile. Lewis and Doorlag (2006) explained that the aims of accommodations for students with behavioral and emotional disabilities are often to help regulate behaviors and help students identify the consequences of positive and negative behaviors. The ultimate goal for educators in these situations was to "identify and assess situations that may be difficult for students before they reach a point of crisis" (Hammel, 2017, p. 72). Due to the nature of these disabilities, it is reasonable to assume that teacher planning and alterations frequently vary between students and student responses.

Research question four queried if elementary music teachers saw academic, musical, and social growth in students in each category of disabilities. Nearly all educators (n=13) reported social, musical, and academic growth in their students with disabilities. Across disability categories, social growth received very high scores. Specifically, social growth was the highest category in students with physical disabilities (n=10) and students with emotional and behavioral disabilities (n=13). One educator freely responded and said growth in confidence and self-esteem was observed in a student with physical disabilities. In another free response, an educator stated they observed growth in self-behavior management. This finding aligns with Grimsby (2018), who also saw social growth in her experiences in teaching students with disabilities. Social growth was the

second-highest growth category in students with cognitive disabilities (*n*=11). Kalgotra and Warwal (2017) found that music intervention that included a range of activities from singing, chanting, and playing a drum effectively avoided violent, destructive behavior in students with intellectual disability. The strong social growth across disability categories may be credited to the diverse and collaborative opportunities elementary music classrooms offer in movement, performance, and listening activities (Küpana, 2015). This observation is congruent with research supporting the natural connections between music and social-emotional learning (Donovan, 2020; Edgar, 2017; Raschdorf et al., 2021; Varner, 2019).

The survey respondents were also asked whether they observed musical growth in their students with disabilities. It was the highest growth category for students with cognitive disabilities (n=13) and the second-highest growth category for students with physical disabilities (n=8) and emotional and behavioral disabilities (n=11). It is expected for all students, including students with disabilities, who receive music instruction at school to experience musical growth. Regarding musical growth in students with disabilities, there is little research. Draper (2017) observed four students with specific learning disabilities or speech-language impairments in a music class and found these students performed singing or playing instruments accurately or mostly accurately and answered music theory and literacy questions correctly. While the current study did not individually assess musical growth in students with disabilities, surveyed teachers observed musical growth in their students with disabilities, which is consistent with Draper's (2017) results. The topic of musical growth in students with disabilities is an area of future research.

Academic growth was seen the least in all three categories of disabilities (physical, cognitive, emotional and behavioral). This could be because the elementary music teacher is not with the students much outside the music classroom to know if academic has occurred. Like musical growth, academic growth is expected since all students in elementary schools should experience academic growth. While it is unknown whether participation in music classes increases students' academic growth, Darrow and Armstrong (1999) concluded that music classrooms were able "to provide a positive environment in which students with autism can succeed academically while behaving appropriately" (p. 17). Whipple (2004) conducted a meta-analysis and found music to be supportive in assisting students with autism, yet it is not established if music is the cause of increased academic achievement in students with autism or other disabilities.

This study was completed as a starting point for future research in this area. It laid the foundation to assess educator interaction with students, action in adjustments, and knowledge of working with students with disabilities. With this knowledge, future studies can address the specific needs of teachers in this area. Future research will aid the needs and questions precisely articulated by educators active in the profession of teaching to benefit them, their students, and their students' learning. More specifically, practical research can be conducted to explore the general climate surrounding working with students with disabilities.

Limitations of this study include the limited sample size and generalizability. Further research includes replicating this study with a larger sample size of statewide or nationwide elementary music teachers to allow for generalizability in findings. Expanding this research will allow for further advances in the study of music education for students with disabilities without limitations. In addition, more research can be conducted to assess educators' knowledge of the characteristics and standard adjustments for disabilities in their classrooms. Lastly, future research monitoring musical growth in students with disabilities through assessment would add more depth to these studies.

In conclusion, music education for students with disabilities contributes to their growth. Music

is a powerful tool that can benefit children of all ages and abilities (Fix, 1999). Researchers can assist in exploring the frequency and magnitude of growth that educators observe in their students. Assessing how educators tailor their instruction for students with disabilities in their music classrooms can also lead to more knowledgeable and better-equipped educators. One participant stated:

The music classroom is a generally inclusive setting where the teacher and peers often adjust to accommodate and include learners with special needs. It is a beautiful thing to witness. That being said, thinking of those special needs prior to instruction is critical to student success for all learners.

By incorporating all students in the classroom in the best way possible, educators are making way for a new generation of robust, meaningful music education.

Keywords: students with disabilities, elementary music instruction, prevalence of disabilities, growth (musical, social, and academic)

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### References

- Allan, A. A. (2022). Vision 2020: A review of 20 years of inclusion studies in music education. Update: Applications of Research in Music Education, 40(2), 47-55. https://doi:10.1177/87551233211040088
- Bartolome, S. J. (2013). Growing through service: Exploring the impact of service-learning experience on preservice educators. *Journal of Music Teacher Education*, 23(1), 79-91. https://doi.org/10.1177/1057083712471951
- Chen, Y. (2007). A research procedure and study of elementary music for children with special needs in inclusive music programs (Publication No. 3293808) [Doctoral dissertation, University of Idaho]. ProQuest Dissertations and Theses Global.
- Colwell, C. M., & Thompson, L. K. (2000). "Inclusion" of information on mainstreaming in undergraduate music education curricula. *Journal of Music Therapy*, 37(3), 205–221. https://doi.org/10.1093/jmt/37.3.205
- Culp, M. E., & Salvador, K. (2021). Music teacher education program practices: Preparing teachers to work with diverse learners. *Journal of Music Teacher Education*, 30(2), 51–64. https://doi.org/10.1177/1057083720984365
- Darrow, A. A., & Armstrong, T. (1999). Research on music and autism: Implications for music educators. *Update: Applications of Research in Music Education*, 18(1), 15-20. https://doi.org/10.1177/875512339901800103
- Davila, G. A. (2013). A graduate course on inclusion: Four elementary/general music educators' perceived attitudes and applications in the classroom (Publication No. 3608227) [Doctoral dissertation, University of Iowa]. ProQuest Dissertations and Theses Global.
- Donovan, J. (2020). Social emotional learning when schools reconvene: What we can do. Orff Reverberations.

- Draper, A. R. (2021). Music education for students with autism spectrum disorder in a full-inclusion context. *Journal of Research in Music Education*, 70(2), 132–155. https://doi.org/10.1177/00224294211042833
- Draper, E. A. (2017). Observations of children with disabilities in four elementary music classrooms. *Update:* Applications of Research in Music Education, 36(1), 12–19. https://doi.org/10.1177/8755123316660594
- Edgar, S. N. (2017). Music education and social emotional learning: The heart of teaching music. GIA Publications.
- Education For All Handicapped Children Act, Pub. L. No. 94-142 § 611 (1975). https://www.govinfo.gov/content/pkg/STATUTE-89/pdf/STATUTE-89-Pg773.pdf
- Grimsby, R. (2018). Adaptations for first steps in music and conversational solfege in the general music classroom. In J. Feierabend & M. Strong (Eds.), Feierabend Fundamentals: History, Philosophy, and Practice (pp. 381-431). GIA Publications, Inc.
- Grimsby, R. (2020a). "Because We Are Important!": Music educators and special education paraprofessionals in a community of practice [Doctoral dissertation, Michigan State University].
- Grimsby, R. (2020b). "Anything is better than nothing!" Inservice teacher preparation for teaching students with disabilities. *Journal of Music Teacher Education*, 29(3), 82-86. https://doi.org/10.1177/1057083719893116
- Hammel, A.M. (1999). A study of teacher competencies necessary when including special learners in elementary music classrooms: The development of a unit of study for use with undergraduate music education students (Publication No. 9926079) [Doctoral dissertation, Shenandoah Conservatory]. ProQuest Dissertations and Theses Global.
- Hammel, A. M. (2017). Teaching music to students with special needs: A practical resource. Oxford University Press.
- Hammel, A. M., & Hourigan, R. M. (2017). Teaching music to students with special needs: A label-free approach (2nd edition). Oxford University Press.
- Hoffer, C. (2017). Introduction to music education (Fourth Edition). Waveland Press, Inc.
- Hourigan, R. M. (2007). A special needs field experience for preservice instrumental music educators. *Contributions to Music Education*, *34*, 19–33. https://jstor.org/stable/24127256
- Hourigan, R. M. (2009). Preservice music teachers' perceptions of fieldwork experiences in a special needs classroom. *Journal of Research in Music Education*, 57(2), 152–168. https://doi.org/10.1177/0022429409335880
- Individuals with Disabilities Education Act of 2004, Pub L. No. 108-446, 118 Stat. 2803 (2004). http://uscode.house.gov/view.xhtml?path=/prelim@title20/chapter33&edition=prelim
- Kauffman, J. M., Hallahan, D. P., & Pullen, P. C. (2017). *Handbook of special education*. Taylor & Francis.
- Küpana, M. (2015). Social emotional learning and music education. SED Journal of Art Education, 3(2), 75–88. https://doi.org/10.7816/sed-03-01-05
- Jones, S. K. (2015). Teaching students with disabilities: A review of music education research as it relates to the Individuals with Disabilities Education Act. *Update: Applications of Research in Music Education*, 34(1), 13–23. https://doi.org/10.1177/8755123314548039
- Lewis, R. & Doorlag, D. (2006). Teaching special students in general education classrooms (7th ed.). Pearson.
- Linsenmeier, C.V. (2004). The impact of music teacher training on the rate and level of involvement of special education students in high school band and choir (Publication No.

- 3159804) [Doctoral dissertation, Kent State University]. ProQuest Dissertations and Theses Global.
- Majerus, C., & Taylor, D. M. (2020). Elementary music teachers' experiences training and collaborating with paraprofessionals. *Update: Applications of Research in Music Education*, 39(1), 27–37. https://doi.org/10.1177/8755123320935635
- McCord, K. A., & Watts, E. H. (2010). Music educators' involvement in the Individual Education Program process and their knowledge of assistive technology. *Update: Applications of Research in Music Education*, 28(2), 79–85. https://doi.org/10.1177/8755123310361683
- Raschdorf, T., May, B. N., & Searcy, A. (2021). Integrating social-emotional learning into our "new normal" teaching elementary general music. *General Music Today*, 34(2), 42–48. https://doi.org/10.1177/1048371320961372
- Reynolds, A. M., Jerome, A., Preston, A.L., & Haynes, H. (2005). Service-learning in music teacher education: An overview. *Journal of Music Teacher Education*, 13(2), 9-17. https://doi.org/10.1177%2F10570837040130020103
- Salvador, K. (2010). Who isn't a special learner? A survey of how music teacher education programs prepare future educators to work with exceptional populations. *Journal of Music Teacher Education*, 20(1), 27–38. https://doi.org/10.1177/1057083710362462
- Scott, L. P., Jellison, J. A., Chappell, E. W., & Standridge, A. A. (2007). Talking with music teachers about inclusion: Perceptions, opinions and experiences. *Journal of Music Therapy*, 44(1), 38–56. https://doi.org/10.1093/jmt/44.1.38
- Smith, D. S., & Wilson, B. L. (1999). Effects of field experience on graduate music educators' attitude toward teaching students with disabilities. *Contributions to Music Education*, 26(1), 33–49. http://jstor.com/stable/24127007
- VanWeelden, K., & Meehan, L. (2016). Teaching children with disabilities: Preparation through state music educator's association conferences. *Update: Applications of Research in Music Education*, 35(1), 5-12. http://doi.org/10.1177/8755123315582069
- VanWeelden, K., & Whipple, J. (2005). The effects of field experience on music education majors' perceptions of music instruction for secondary students with special needs. *Journal of Music Teacher Education*, 14(2), 62–6. https://doi.org/10.1177/10570837050140020109
- Varner, E. (2019). General music learning is also social and emotional learning. *General Music Today*, 33(2), 74–78. https://doi.org/10.1177/1048371219891421
- Whipple, J. (2004). Music in interventions for children and adolescents with autism: A meta-analysis. *Journal of Music Therapy*, 41(2), 90-106. https://doi.org/10.1093/jmt/41.2.90