

LIBERTY UNIVERSITY

SCHOOL OF MUSIC

Exploring the Semblant Effects of COVID-19 on Minnesota High School Band Programs

A Thesis Submitted to
The Faculty of the School of Music
In Candidacy for the Degree of
Doctor of Music Education

by

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ABSTRACT

At the time of this writing, the impact of the recent COVID-19 pandemic on music education at the secondary level is yet unknown. This study aims to collect and review available data to determine if the COVID-19 pandemic may have had an effect on participation in high school band in Minnesota. This convergent parallel mixed methods research study examines statistical data available through the Freedom of Information Act from a sampling of 167 out of a possible 476 public high schools in Minnesota to determine a potential impact between the COVID-19 pandemic and enrollment in high school band.¹ This is achieved by reviewing high school band enrollment trends from the past five years and comparing them to the difference in enrollment levels in the falls of 2019, 2020, and 2021. A survey was also sent to Minnesota band directors to assess their perspectives regarding the effects of the COVID-19 pandemic on their band programs. The survey was distributed electronically, and seventy-seven Minnesota high school band directors completed the survey. The results of the study observed a decrease in high school band participation from the fall of 2019, before the COVID-19 pandemic, to the fall of 2021. The data show a decrease in enrollment in Minnesota high school band programs following the onset of the COVID-19 pandemic. Band director feedback is consistent with these findings. This project serves as an early benchmark in understanding how the COVID-19 pandemic may have affected participation in band in Minnesota high schools, and as an early metric on which future research regarding band participation and the COVID-19 pandemic may be based.

Keywords: COVID-19 pandemic, high school band participation, instrumental music education

¹ “About FIOA,” Freedom of Information Act, last modified March 15, 2023, accessed March 23, 2023, <https://www2.ed.gov/policy/gen/leg/foia/foiatoc.html>.

DEDICATION

The application for the graduate program for this Doctor of Music Education degree was sent in March of 2020, just as the first cases of COVID-19 were being reported in the United States. Little did I know that the proceeding months and years would be trying for everyone, in addition to graduate coursework. Educators struggled to connect with their musician students and their families through screens, masks, and any means necessary to support families and communities in any way they could. This project is dedicated to the music educators who did everything in their power to “make it happen” for their students and ensembles throughout the pandemic. This project is also dedicated to the seventy-seven anonymous Minnesota band directors who took the time to complete the survey for this study. It is by the generous grace and gift of time from these fine individuals that without which this project and the insights gathered would not exist.

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LIST OF ABBREVIATIONS

CDC	United States Centers for Disease Control and Prevention
COVID-19	Coronavirus disease 2019, caused by the SARS-CoV-2 virus, which is a member of the coronavirus family
FIOA	Freedom of Information Act
FTE	Full-time equivalency of employment
MDE	Minnesota Department of Education
PPE	Personal Protective Equipment

Chapter One: Introduction

The COVID-19 Pandemic

A dangerous disease, COVID-19, was discovered in Wuhan, China, in December 2019.² The World Health Organization (WHO) decided on and announced the official name for the disease on February 11, 2020, as: “coronavirus disease 2019, abbreviated COVID-19.”³ COVID-19 is caused by the SARS-CoV-2 virus, which is a member of the coronavirus family.⁴ The virus itself earns its name from the shape of its spike proteins that give the appearance of a crown, or “corona.”⁵ COVID-19 was considered highly contagious and “quickly spread around the world.”⁶ The United States Centers for Disease Control and Prevention (CDC) estimates that from February of 2020 through March of 2021, there were 114.6 million total infections, 97.1 million estimated symptomatic illnesses, and 5.6 million estimated hospitalizations due to COVID-19.⁷ With this in mind, it was assumed that asymptomatic carriers of COVID-19 might

² “COVID-19: Basics of COVID-19,” Centers for Disease Control and Prevention, last updated May 24, 2021, accessed June 26, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/your-health/about-COVID-19/basics-COVID-19.html>.

³ Ibid.

⁴ Ibid.

⁵ Ibid.

⁶ Ibid.

⁷ “COVID-19: Estimated Disease Burden of COVID-19,” Centers for Disease Control and Prevention, last updated May 19, 2021, accessed June 26, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/burden.html>.

have been able to spread the virus to others.⁸ As of June 25, 2021, the CDC reported that over 600,000 Americans had died from the virus.⁹

As the virus spread, it also mutated, spawning several variants, six of which were notable in the United States as of June 2021.¹⁰ The six variants highlighted by the CDC appeared to spread “more easily and quickly than other variants,” however, studies suggest that the three vaccines approved for use in the United States as of June 2021—Pfizer-BioNTech (approved for ages twelve and older), Moderna (approved for ages eighteen and older), Johnson & Johnson/Janssen (approved for ages eighteen and older)—“work on the circulating variants.”^{11,12}

In the spring of 2020, the spread of the COVID-19 virus reached the United States and led to widespread shutdowns of typical infrastructure. Many states initiated an initial two-week lockdown in an attempt to control the spread of the virus. The intention was to slow or stop the spread through the reduction of risk by observing “social distancing” recommendations of staying a minimum of six feet away from others outside of one’s household, wearing a mask, a focus on thorough hand washing, and sanitization of surfaces.¹³

⁸ “COVID-19: How to Protect Yourself & Others,” Centers for Disease Control and Prevention, last updated June 11, 2021, accessed June 26, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>.

⁹ “COVID-19: COVID Data Tracker Weekly Review, Interpretive Summary for June 25, 2021,” Centers for Disease Control and Prevention, last updated June 25, 2021, accessed June 26, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/COVID-data/COVIDview/index.html>.

¹⁰ “COVID-19: About Variants of the Virus that Causes COVID-19,” Centers for Disease Control and Prevention, updated June 24, 2021, accessed June 26, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/variants/variant.html>.

¹¹ Ibid.

¹² “COVID-19: Different COVID-19 Vaccines,” Centers for Disease Control and Prevention, updated May 27, 2021, accessed June 26, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines.html>.

¹³ “COVID-19: How to Protect Yourself & Others,” Centers for Disease Control and Prevention.

COVID-19 And Minnesota Schools

In Minnesota, the initial lockdown began on March 18, 2020, and was to last until March 27, 2020.¹⁴ During this initial shutdown of schools and all “non-essential” services, many school districts engaged in distance learning. In many states, local governments extended this initial distance learning mandate beyond the initial two weeks and it lasted for the rest of the 2019–2020 school year.¹⁵ State officials in Minnesota clarified that “students must have access to appropriate educational materials and received daily interaction with their teachers” to finish out the 2019–2020 school year.¹⁶ Several Minnesotan districts utilized online platforms to share videos, assignments, and connect with students, and some quickly moved to distribute internet hotspots to families without internet and digital devices to students in need to fulfill this mandate.¹⁷ Other schools, “especially elementary schools or those with students who don’t have great internet access,” fulfilled this requirement by distributing “analog learning packets either via bus route or parent pick-up systems.”¹⁸ In addition to learning materials, some Minnesotan communities utilized school bus routes to bring school breakfast and lunch to students.¹⁹

¹⁴ Bill Strande, “MN School Closure Starts on Wednesday; 35 Cases of COVID-19,” KARE 11 News, last updated March 16, 2020, accessed October 3, 2021, <https://www.kare11.com/article/news/health/coronavirus/mn-schools-close-coronavirus/89-ebd39743-f5fb-4378-98e7-7ce30805867e>.

¹⁵ Elizabeth Shockman, “COVID 19: Minnesota’s Schools Won’t Reopen this Academic Year: Here’s What You Need to Know,” *Minnesota Public Radio News*, April 4, 2020, accessed June 7, 2021, <https://www.mprnews.org/story/2020/04/24/minnesotas-schools-wont-reopen-this-academic-year-heres-what-you-need-to-know>.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Kirsti Marohn, “In Little Falls, Bus Drivers Bring Meals, Smiles to Home-Bound Students,” *Minnesota Public Radio News*, March 19, 2020, accessed June 27, 2021, <https://www.mprnews.org/story/2020/03/19/in-little-falls-bus-drivers-bring-meals-smiles-to-homebound-students>.

Cases of COVID-19 infections began to increase during the summer of 2020, and in the fall of the 2020–2021 school year, students and teachers were allowed to return to in-person learning with new safety precautions in place. Every district in the state of Minnesota was also mandated to offer distance learning as an option for families in addition to the option for in-person learning.²⁰ Over the course of the 2020–2021 school year, the number of COVID-19 cases increased in many counties to the point where authorities forced schools to move everyone to distance learning based on the guidelines outlined in the Minnesota Safe Learning Plan for 2020–2021.²¹ Throughout this constant change, teachers were forced to adapt their teaching styles and curriculum to the situation at hand, sometimes simultaneously teaching in-person students in their classrooms while also teaching students through online video-conferencing platforms.

Background

Distance Learning

One of the consequences of the lockdown and pandemic was that students and teachers had to engage in distance learning from their homes when face-to-face teaching and learning was not feasible.²² While it was difficult for many educators to teach within this learning mode having little or no prior experience, there have been studied benefits and challenges historically associated with distance learning. Music educator and scholar Philip M. Hash highlights the benefits of distance learning as “facilitating instruction to remote areas, flexible scheduling, and

²⁰ “Safe Learning Plan for 2020–2021: A Localized, Data-Driven Approach,” Minnesota Department of Education, updated August 27, 2020. Accessed June 24, 2021, 17, <https://education.mn.gov/mdeprod/groups/communications/documents/basic/bwrl/mdmz/~edisp/mde033418.pdf>.

²¹ *Ibid.*, 5–6.

²² Michele Biasutti, Roberta Antonini Philippe, and Andrea Schiavio, "Assessing Teachers' Perspectives on Giving Music Lessons Remotely during the COVID-19 Lockdown Period," *Musicae Scientiae* (2021): 2.

reduced travel,” as well as students feeling safer in an online space.²³ Distance learning also offers an opportunity for “flexibility and multimodal pedagogy through written materials, message board discussions, emails, and videos.”²⁴ Hash continues, stating that the “Internet facilitates these and other processes such as recording and file sharing, all of which might sustain students’ interest more than traditional instruction.”²⁵

While there may be benefits to distance learning, there also exist problems and challenges. Challenges include equitable technology access for all students, “especially high poverty and rural schools,” as well as “securing privacy and security of online data and interactions.”²⁶ Technological challenges arise as well, especially considering “connectivity of networks, and firmware” along with “audio quality and delay...especially for synchronous applied lessons.”²⁷ In addition to teaching content in an online environment, educators “must comply with copyright laws, maintain student motivation and engagement, build pupils’ information literacy, and meet the needs of all learners in the online environment.”²⁸

Teaching Band During COVID-19

A thorough understanding of the logistical nature of the COVID-19 pandemic response is instrumental to laying the groundwork for understanding the challenges band teachers faced

²³ Phillip M. Hash, "Remote Learning in School Bands during the COVID-19 Shutdown," *Journal of Research in Music Education* 68, no. 4 (2021): 382.

²⁴ *Ibid.*, 382–383.

²⁵ *Ibid.*, 383.

²⁶ *Ibid.*

²⁷ *Ibid.*, 382–383.

²⁸ *Ibid.*, 382.

during the 2019–2020 and 2020–2021 school years. Band is unique in that aerosols are created when playing a wind instrument.²⁹ Special mitigation strategies and Personal Protective Equipment (PPE) had to be utilized during in-person band rehearsals.³⁰ These included special PPE, such as instrumentalist masks that had flaps or zippers to access the mouth when playing, bell covers that would go on the end of instrument bells,³¹ cloth bags to cover woodwind keys, special devices for flute head joints to catch the aerosols, latex gloves for percussionists to avoid touching contaminated surfaces.³² Additionally, restrictions limited the amount of time students were allowed to practice music in a room to thirty minutes in most cases.³³ After that, it was required to let air circulate before performers could return to the same space. Equipment, such as music stands and chairs, had to be sanitized in between classes of students. Student chairs were kept at a minimum of six feet of separation, limiting the number of students that could fit in a room.³⁴ With this metric, schools reduced band class sizes to fit the physical dimensions of their music rooms, and students experiencing in-person learning had fewer colleagues with whom to play.

²⁹ Adam T. Schwalje and Henry T. Hoffman, "Wind Musicians' Risk Assessment in the Time of COVID-19," *International Musician* 118, no. 8 (2020): 17.

³⁰ Tehya Stockman et al., *Measurements and Simulations of Aerosol Released While Singing and Playing Wind Instruments* (University of Colorado Boulder): 6, updated April 4, 2021, accessed June 6, 2021, <https://scholar.colorado.edu/concern/articles/hq37vp75r>.

³¹ Stockman et al., 6.

³² "Recommendations for Music Activities and Performances During COVID-19," Minnesota Department of Health, last updated May 28, 2021, accessed June 13, 2021: 3, <https://www.health.state.mn.us/diseases/coronavirus/musicguide.pdf>.

³³ *Ibid.*, 29.

³⁴ "Unprecedented International Coalition led by Performing Arts Organizations to Commission COVID-19 Study," National Federation of High School Associations, last updated April 30, 2021, Accessed June 6, 2021, <https://www.nfhs.org/articles/unprecedented-international-coalition-led-by-performing-arts-organizations-to-commission-COVID-19-study>.

Adjusting to distance learning was especially challenging for many band directors and music students. The inability of students to participate by playing instruments in real-time due to Internet latency meant that ensembles could not rehearse together.³⁵ Most typical in-school secondary band classes are structured as full ensemble rehearsals, with musicians playing and the music teacher giving continuous formative feedback. In distance learning, students could not hear each other play in real time, nor could full ensembles receive teacher feedback on group playing. Consequentially, students also lost the social aspect of playing an instrument with an ensemble, and thus, their ability to learn through participating in a social community.³⁶ Additionally, many teachers offered learning in both synchronous and asynchronous modes.³⁷ Large social gatherings were prohibited, and districts canceled public performances of school ensembles. Much of the students' music experience was based on individual practice.³⁸ Over the course of the pandemic, directors from around the country reported that enrollment in their band programs was declining and that they feared for the vitality of their programs.³⁹

Statement of the Problem

The full effect of the COVID-19 pandemic on band programs, both in remote learning and with mitigation strategies, has not been studied. Anecdotally, band directors from the United

³⁵ Hash, 383.

³⁶ Laura Huhtinen-Hildén, Jessica Pitt, and Taylor and Francis, *Taking a Learner-Centered Approach to Music Education: Pedagogical Pathways*, (Boca Raton, FL: Routledge, 2018): 12.

³⁷ Pete Watkins, "How Did Remote Teaching During the COVID-19 Crisis Affect Faculty's Attitudes and Beliefs about Online Teaching?" (PhD diss., Temple University, 2021): 42.

³⁸ Manfred Nusseck and Claudia Spahn, "Musical Practice in Music Students during COVID-19 Lockdown," *Frontiers in Psychology* 12, (2021): 2.

³⁹ Mike Lawson, "50 Directors 2020 Survey Report on COVID-19 Impact," *School Band and Orchestra* 23, no. 12 (2020): 17.

States and Canada shared concerns for the quality of instruction and student experience, along with concerns about enrollment in their band programs.⁴⁰ For music educators to gain insight into how the phenomenon of the COVID-19 pandemic may have affected band programs in Minnesota, researchers must expand the limited body of research.

Statement of the Purpose

The purpose of this study is to investigate the possible impact of COVID-19 on participation in secondary band programs in Minnesota. This will be done by studying trends in band enrollment in Minnesota high schools, along with surveying Minnesota band directors about the observations of their own band programs related to participation and the COVID-19 pandemic. As there is currently little research in the field of music education on the impact of the COVID-19 pandemic, this thesis seeks to edify this situation.

Significance of the Study

With the COVID-19 pandemic affecting its third school year, it is critical for contemporary researchers to record data to create a baseline understanding and to record this historically significant phenomenon from primary sources. In the field of music education, it is crucial to determine if the COVID-19 pandemic may have affected school music participation. Additionally, it was essential to observe the perceptions of band directors to determine if they were in agreement with the statistical data reported by schools. Conducting this research during the pandemic is vital for gaining a deeper understanding of the conditions and immediate impact.

⁴⁰ Lawson, 18.

The short and long-term effects of the COVID-19 pandemic on enrollment may have continuing repercussions.⁴¹ Many band programs are staffed based on enrollment due to the course's classification as an elective, that is, a class chosen by the student as opposed to being required by an institution. In prior informal surveys conducted, band directors identified that their programs had seen a decline in enrollment since the beginning of the pandemic.⁴² If the COVID-19 pandemic correlates with a decrease in enrollment, then band directors may lose full-time equivalency (FTE), their job, or see their band programs eliminated. Fewer instrumental musicians at the secondary level also would lead to the consequence of fewer prospective collegiate musicians. College music programs may be facing a reduction as well if there is a decrease in band participation at the secondary level. The retail music instrument industry could also suffer in the event of a decline in participation, as fewer musicians may translate to fewer customers, as early data showed a decrease in band instrument sales following the onset of the pandemic.⁴³ It is imperative that practitioners in the field of music education begin to understand any ramifications of the COVID-19 pandemic as soon as possible so that interventions and responses can be considered if necessary.

⁴¹ Lawson, 16.

⁴² Kevin Young, "Improvising, Engaging & Growing Teaching & Learning through the COVID-19 Pandemic," *Canadian Musician* 42, no. 6 (2020): 51.

⁴³ "Analysis: How COVID-19 Impacted Musical Instrument Sales Online," Pattern Data Science, May 12, 2021, accessed June 6, 2021, <https://pattern.com/blog/analysis-how-COVID-19-impacted-musical-instrument-sales-online>.

Research Questions

Without a wealth of data collected on the effects of the COVID-19 pandemic on band programs in Minnesota, the need to study this phenomenon is necessary. Therefore, this study sought to answer the following questions:

1. In what ways did the COVID-19 pandemic likely impact participation in high school band programs in Minnesota?
2. What are the perceptions of Minnesota band directors on the possible impact of the COVID-19 pandemic on their band programs?

Hypotheses

The following were the specific corresponding hypotheses:

1. The COVID-19 pandemic impacted participation in high school band programs in Minnesota in terms of enrollment, program size, and program offerings.
2. Minnesota band directors perceive and report that the COVID-19 pandemic reduced program enrollment, reduced band FTE in their schools, and reduced or delayed musical ability in their performing ensembles.

Based on the preliminary unscientific research reviewed, band directors from around the country echo similar concerns about participation in their programs in the wake of the COVID-19 pandemic.⁴⁴

⁴⁴ Lawson, 18.

Summary

The COVID-19 pandemic was a phenomenon that influenced many aspects of day-to-day life in the United States. Many states, including Minnesota, created mandates that affected education in both the spring of 2020 and during the entire 2020–2021 school year. Music education was affected, as teachers were required to hold classes remotely or in person using mitigation practices. While it is yet unknown what effect the pandemic may have had on enrollment in high school band programs in Minnesota, anecdotally, band directors in North America have shared concerns about drops in enrollment and cuts to band programs.⁴⁵ A review of available information on how the COVID-19 pandemic has affected education, and music education specifically, has been made to demonstrate the abnormal conditions in which students experienced and were able to participate in band. With this phenomenon occurring within the past two years, more data and research is needed to understand better the short and long-term effects of the COVID-19 pandemic on music education.

Definition of Terms

This study is based on the COVID-19 pandemic, a historical phenomenon, and how it relates to music education. Much of the terminology used within the study has become commonplace due to the pandemic. Many practices and procedures used during the pandemic arose from attempts to mitigate the spread of the virus, and much of the terminology is related to these efforts. Within this context, understanding the societal and educational realities of the COVID-19 pandemic is key to understanding the current state of band programs.

⁴⁵ Lawson, 14–18.

Aerosols

Aerosols are tiny droplets of vapor that can spread the virus, originating in a person's lungs and leaving the body when exhaling.⁴⁶ To help mitigate this risk, many states, including Minnesota, put in place a "mask mandate" where citizens were required to wear either medical-grade paper masks or cloth masks over their mouths and noses.⁴⁷ The purpose of the mask was to stop the spread of aerosols.

Hybrid Learning

Hybrid learning occurs when students have a mix of in-building and distance learning. For example, a hybrid learning model may include attending school in the building on Monday and Thursday while engaging in online distance learning on Tuesday, Wednesday, and Friday.

In-Person Learning

In-person learning refers to students who are learning in the school building. Full in-person learning refers to the model where students attend school in the school building every day, Monday through Friday.

Learning Models

In the context of education during the COVID-19 pandemic, learning models refer to the mode in which students receive instruction.

⁴⁶ Stockman et al., 6.

⁴⁷ Dan Kraker and Sara Porter, "Minnesota's Mask Mandate: What You Need to Know," Minnesota Public Radio News. July 22, 2020, accessed June 6, 2021, <https://www.mprnews.org/story/2020/07/22/minnesotas-mask-mandate-what-you-need-to-know>.

Online Distance Learning

Online distance learning (sometimes referred to as remote learning) as a model occurs when students are learning from home, without coming into the school building, using the internet.⁴⁸

Personal Protective Equipment

Personal protective equipment (PPE) is “equipment worn to minimize the exposure to hazards that cause serious workplace injuries and illnesses.”⁴⁹ In schools, this included face masks, face shields, and latex gloves. In the band room, this also included specialized face coverings designed to be worn while playing an instrument.⁵⁰

Social Distancing

Social distancing (also known as physical distancing) means avoiding physical proximity to others as much as possible, keeping a minimum of six feet from others.⁵¹ This includes avoiding crowds and poorly ventilated areas when possible and avoiding contact with anyone who may be sick or may have had exposure to the virus.⁵²

⁴⁸ Hash, 382.

⁴⁹ United States Department of Labor. “Occupational Safety and Health Administration: Personal Protective Equipment.” Accessed June 25, 2021. <https://www.osha.gov/personal-protective-equipment>.

⁵⁰ “Recommendations for Music Activities and Performances During COVID-19,” Minnesota Department of Health, last updated May 28, 2021, accessed June 13, 2021: 3. <https://www.health.state.mn.us/diseases/coronavirus/musicguide.pdf>.

⁵¹ “Social Distancing,” Centers for Disease Control and Prevention, last updated November 17, 2020, accessed June 6, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html>.

⁵² “COVID-19: How to Protect Yourself & Others,” Centers for Disease Control and Prevention.

Synchronous and Asynchronous

Synchronous refers to online activities that occur in real-time, often on a streaming platform, and asynchronous refers to materials that can be viewed or engaged with at any time, independent of the teacher.⁵³

⁵³ Watkins, 8.

Chapter Two: Literature Review

Introduction

This literature review describes the research related to the COVID-19 pandemic and its effects on music education as it pertains to the current study. As Bethany Nickel notes: “Coronavirus-era music education is a recent development (stemming from March 2020), there is a scarcity of published academic studies on the topic.”⁵⁴ Accordingly, to provide the reader with a more comprehensive understanding of the topic, the researcher found relevance in utilizing information from sources beyond academic journals, books, and theses. This includes sources from government entities, journalism, professional organizations, and online media. This material intends to offer a firsthand understanding of the COVID-19 pandemic and its immediate effects, impressions, and realities within the timeframe of lived experiences and from the available primary source materials. This inaugural research commences with the expectation that more peer-reviewed studies and research will develop in the coming years, investigating and informing on the topic through a more empirical and scientific lens.

This chapter is divided into five sections, addressing the topics relevant to the current study. The first section begins with an overview of educational practice during the first year of the COVID-19 pandemic. As the present study focuses specifically on education in the state of Minnesota, policies and practices relevant to teaching and learning in Minnesota public schools during the first year of the COVID-19 pandemic are then reviewed. The unique realities of teaching band in Minnesota during the 2020–2021 school year, the first full school year of the COVID-19 pandemic, are then explored. As the study focuses on high school band in Minnesota,

⁵⁴ Bethany J. Nickel, “High School Band Communities of Practice During COVID-19: A Multiple Case Study” (PhD diss., Case Western University, August, 2021), 20.

an overview of Minnesota’s high school band landscape is considered. Finally, as the current study considers possible factors to changes in band enrollment, the concluding section investigates motivational factors connected to band retention and attrition.

Section I: Education During the COVID-19 Pandemic

The onset of the COVID-19 pandemic forced all members in the field of education to adjust how they served and educated students. Sumitra Pokhrel and Roshan Chhetri explained the reality of the situation: “Lockdown and social distancing measures due to the COVID-19 pandemic have led to closures of schools, training institutes, and higher education facilities in most countries.”⁵⁵ During the COVID-19 pandemic, Barnett Berry noted of teachers, “reports...about heroic efforts by educators to meet their students’ needs,” understanding that “their first priority...is to reach out to students, check in on them and their families, and support them as whole children, not test takers.”⁵⁶ Within the new reality of the COVID-19 pandemic, this was a paradigm shift in how educators connected with students and delivered content.⁵⁷ Online and distance learning became the answer to which the world turned while schools were closed early on in the pandemic, and it seemed that teachers adapted to an “Education in Emergency” status through online collaborative platforms such as “Microsoft Teams, Google Classroom, Canvas, and Blackboard,” as they had to “adopt a system they [were] not prepared for.”⁵⁸ Many educators did not have experience teaching through online platforms. Pokhrel and

⁵⁵ Sumitra Pokhrel and Roshan Chhetri, "A Literature Review on Impact of COVID-19 Pandemic on Teaching and Learning," *Higher Education for the Future* 8, no. 1 (2021): 134.

⁵⁶ Barnett Berry, "Teaching, Learning, and Caring in the Post-COVID Era," *Phi Delta Kappan* 102, no. 1 (2020): 15.

⁵⁷ Pokhrel and Chhetri, "A Literature Review on Impact of COVID-19," 134.

⁵⁸ Ibid.

Chhetri posit that student assessments were “carried out online, with a lot of trial and error, uncertainty and confusion among the teachers, students, and parents.”⁵⁹

The COVID-19 pandemic created and revealed inequity within the field of education. Countries and areas with unreliable Internet connections and those who could not afford devices led to challenges with e-learning.⁶⁰ This initial phase of the COVID-19 pandemic also highlighted educational issues with “accessibility, affordability, flexibility, learning pedagogy, life-long learning and educational policy.”⁶¹ As Wentz posits, “Not all school systems or student homes are created equal,” going on to explain that even though most people seem to be connected, “there are still school systems and families that do not have the internet speed capability to effectively learn completely online.”⁶² Through distance learning in Minnesota during the spring of 2020, teachers delivered educational content differently depending on the existing infrastructure. Some districts provided electronic devices for students and internet hotspots when needed, along with online instruction, while other districts distributed paper packets for students to complete.⁶³

Evidence shows that the COVID-19 pandemic may have affected education in rural districts differently than in urban or suburban areas. Barnett Berry posits that while there is much still unknown about the long-term impact of COVID-19 on the country, “it is clear already that it

⁵⁹ Pokhrel and Chhetri, “A Literature Review on Impact of COVID-19,” 135.

⁶⁰ *Ibid.*, 136.

⁶¹ *Ibid.*

⁶² Wentz, “String Educators. Reflections,” 5.

⁶³ Shockman, “COVID 19: Minnesota School Closure.”

is having a particularly devastating effect on rural communities.”⁶⁴ He goes on to articulate issues in Fairfield County in South Carolina, such as food insecurity, a high number of immunocompromised citizens, and high unemployment rates, insinuating that similar communities may be dealing with these types of issues.⁶⁵

There is growing evidence that the COVID-19 pandemic affected students negatively. Many professionals and education experts are concerned about the issue of isolation during distancing learning.⁶⁶ Neil F. Katzman and Michael P. Stanton share research from Harvard College that looked at college students’ experiences with moving to remote learning in the spring of 2020. In this study, students reported a decline in overall emotional and physical health.⁶⁷ Katzman and Stanton also raise the concern that remote learning amplifies the issue of cultural education, saying that distance learning is often “taught without respect for cultural sensitivity” of students—they posit, “In most online distance education platforms, students are taught by teachers who know very little about the student’s cultural background, nor social emotional world.”⁶⁸ A longitudinal study of college students conducted by Peter R. Reuter, Bridget L. Foster, and Bethany J. Kruger, concluding in April of 2021, measured students’ physical and mental health and found “a significant difference for some student behaviors and habits, such as sleeping habits, physical activity, breakfast consumption, time spent online or playing video

⁶⁴ Barnett Berry, "Teaching, Learning, and Caring in the Post-COVID Era," *Phi Delta Kappan* 102, no. 1 (2020): 15.

⁶⁵ *Ibid.*, 15.

⁶⁶ Neil F. Katzman and Michael P. Stanton, “The Integration of Social Emotional Learning and Cultural Education into Online Distance Learning Curricula: Now Imperative during the COVID-19 Pandemic,” *Creative Education* 11, no. 9 (September 2020): 1563.

⁶⁷ *Ibid.*

⁶⁸ *Ibid.*, 1565.

games, vaping, and marijuana use, during the COVID pandemic compared with pre-COVID data.”⁶⁹ The study also found that “while study respondents also reported a significant increase in difficulty concentrating, remembering, or making decisions, as well as being impacted by feeling sad or hopeless, there was no increase in the proportion of respondents considering, planning or attempting suicide during COVID.”⁷⁰ A study by Nan Zhao and Guangyu Zhou based in China found evidence to support the adverse mental health effects of increased social media use during the COVID-19 pandemic. Their findings “suggest that social media use particularly contributed to STS [secondary traumatic stress], depression, and anxiety while other media usages were unrelated to mental health.”⁷¹

Section II: Education in Minnesota During the COVID-19 Pandemic

During the 2020–2021 school year, the state of Minnesota required school districts to offer multiple learning models to families, including distance learning and in-person or hybrid learning.⁷² The Minnesota Department of Education required schools to comply with public health guidelines for in-person learning as outlined in the Minnesota Department of Health’s 2020–2021 Planning Guide for Schools, which included guidance on social distancing and minimizing exposure, face coverings, hygiene practices, cleaning and materials handling, monitoring for illness, water and ventilation systems, transportation guidance, and supporting

⁶⁹ Peter R. Reuter, Bridget L. Foster, and Bethany J. Kruger, “A Longitudinal Study of the Impact of COVID-19 Restrictions on Students’ Health Behavior, Mental Health, and Emotional Well-Being,” *PeerJ* 9 (December 2021): 13, accessed April 30, 2023 <http://doi.org/10.7717/peerj.12528>.

⁷⁰ *Ibid.*

⁷¹ Nan Zhao and Guangyu Zhou, “Social Media use and Mental Health during the COVID-19 Pandemic: Moderator Role of Disaster Stressor and Mediator Role of Negative Affect,” *Applied Psychology: Health and Well-being* 12, no. 4 (2020): 1020–1030.

⁷² “Safe Learning Plan for 2020–2021,” Minnesota Department of Education, 17.

mental health and well-being.⁷³ The MDE also created guidance for whether schools should be all in-person, hybrid, or in distance learning based on a formula that measured the number of positive COVID-19 “by county of residence in Minnesota over 14 days per 10,000 people by date of specimen collection.”⁷⁴ In the event that the number was under 10, it allowed for in-person learning for all students. If the number was 10–19, elementary students would be in-person, and secondary students would be hybrid. All students would engage in hybrid learning if the number were 20–29. If the number rose to 30–49, elementary students would engage in hybrid learning, and secondary students would go to distance learning. All students would engage in distance learning if the number rose to fifty or above. This is the guidance under which schools operated until February 22, 2021, when CDC COVID-19 guidelines changed, and Minnesota adjusted its policy to focus on individual school data instead of county data, along the lines of 5% of a school’s population becoming infected to require a change in the learning model.⁷⁵ This new policy is in line with the influenza policy in Minnesota. Following this policy, most schools shifted to full in-person learning, still following the prescribed mitigation strategies. Students could still opt into distance learning for the remainder of the school year.

The Minnesota Department of Education created a list of required criteria for schools implementing in-person and hybrid learning models. The state required the following criteria for schools implementing both in-person and hybrid learning: masking policy, PPE for direct support student services, building routines of hygiene education and practices, daily cleaning and frequent cleaning of high touch surfaces through the day, building level COVID-19 program

⁷³ “Safe Learning Plan for 2020–2021,” Minnesota Department of Education, 5.

⁷⁴ *Ibid.*, 6.

⁷⁵ *Ibid.*, 10.

coordinator, with optional student counterpart, limiting nonessential visitors/volunteers/external groups, discontinue large gatherings/activities that do not allow for social distancing, and monitoring and excluding for illness.⁷⁶ Hybrid learning model had additional required criteria, including: social distancing of six feet at all times in school buildings, school facilities at 50% capacity, transportation at 50% capacity, and sufficient staffing levels to meet the requirements of the model.⁷⁷

While there are many challenges associated with COVID-19 in education, there is hope that the experience may lead to improvement within the field. Schools' role in children's lives beyond formal academic learning became clear. Berry highlights "that the crisis has required educators to look to partners to help them address their students' many needs," suggesting that "schools, universities, local government agencies, nonprofits, religious organizations and others" should all contribute "time, talent, and treasure to the work of teaching, learning, and caring."⁷⁸ These suggestions indicate that relationships forged during the pandemic could be beneficial to future educational endeavors.

Section III: Teaching Band in Minnesota During the 2020–2021 School Year

Band is a unique school subject, and the challenges of the COVID-19 pandemic changed how students and teachers traditionally participated. At the onset of the COVID-19 pandemic in the spring of 2020, the government required that Minnesota students stay home and utilize distance learning. Pokhrel and Chhetri note that "different subjects and age groups require

⁷⁶ "Safe Learning Plan for 2020–2021," Minnesota Department of Education, 8.

⁷⁷ Ibid.

⁷⁸ Berry, 16.

different approaches to online learning” and that “there is no one-size-fits-all pedagogy for online learning.”⁷⁹ Teaching band with COVID-19 safety precautions was challenging in Minnesota during the 2020–2021 school year, both online and in person.

There were multiple challenges associated with teaching online band. While Hash highlights the benefits of distance learning to reach those who would not normally have access to music resources, most band experiences during the pandemic were limited in their application.⁸⁰ One of the most challenging aspects of teaching band online was being unable to perform music together due to latency (sound delay) and sound quality, a known issue in synchronous applied lessons.⁸¹ Due to latency, band directors who engaged their students in live music-making had to do so either one at a time or by playing pre-recorded music and having band students play along with the recording, muted, at their own homes. Some directors had students submit recordings of themselves playing.

In contrast, others employed web-based feedback assessment tools, such as SmartMusic, to help students practice and progress in their musicianship.⁸² Another challenge was that of attendance—students had less accountability to attend class online than they did in a traditional school building. Research carried out in Saudi Arabia by Yasser Ali Alshehri et al. found that less than seventy-five percent of the students normally attended online class video meetings in the spring of 2020, and “many teachers complained about students’ engagement.”⁸³ Due to these

⁷⁹ Pokhrel and Chhetri, "A Literature Review on Impact of COVID-19," 135.

⁸⁰ Hash, 382–383.

⁸¹ *Ibid.*, 383.

⁸² Carla Fowler Tucker, "A Case Study of the Integration of SmartMusic® into Three Middle School Band Classrooms found in Upstate South Carolina," (DoE diss., Gardner-Webb University, 2016), 1–2.

⁸³ Yasser Ali Alshehri et al., “How the Regular Teaching Converted to Fully Online Teaching in Saudi Arabia during the Coronavirus COVID-19.” *Creative Education* 11, no. 7 (July 2020): 994.

challenges, students did not experience a communal band class at routine intervals like in a traditional school year. Kim Friesen shared the experience of an elementary music teacher who found it challenging to teach music “using paper packets with a limited number of students having access to devices at home.”⁸⁴

The Minnesota Department of Health devised a particular set of guidelines for music activities in schools. In addition to the normal CDC and Minnesota COVID-19 practices, the state required musicians to observe the following additional protocols: conductors and musicians that are not playing woodwind or brass instruments are required to wear a face covering at all times, social distancing of six feet between musicians must be maintained at all times, an additional three feet is strongly recommended for trombone players due to the length of the instrument, reduce rehearsal and performance times, reduce the total number of performers in an ensemble, consider keeping ensembles to 25 individuals or less, increase ventilation and air exchange rates, have brass and woodwind musicians wear face coverings designed to work while playing, and having brass and woodwind players use coverings for their instruments to reduce droplet spread while playing.⁸⁵ These additional mitigation measures made rehearsing music in schools challenging. In the event of hybrid learning, only 50% of an ensemble was present in the building at any given time. Ensemble size was reduced even further to accommodate the required social distance of six to nine feet, which made room capacity an issue. Some schools tried to solve this problem by moving ensemble rehearsals to larger rooms like gymnasiums or outside.

⁸⁴ Kim Friesen, "Exploring the Lived Experiences of Rural Southwest Minnesota Teachers in the Spring 2020 Transition to Distance Learning during the COVID-19 Pandemic," (DoE. Diss., Bethel University Minnesota), 2021, 97.

⁸⁵ “Music Activities and Performances During COVID-19,” Minnesota Department of Health, Stay Safe MN, November 18, 2020, acquired via email request from MDH on August 12, 2022, 4–5.

Bell covers affected sound production and intonation on some instruments, and specialized musician masks for brass and woodwind made playing challenging. The Minnesota governor issued executive orders prohibiting social gatherings affecting many co-curricular and extra-curricular events.⁸⁶ Considering that sporting events were not happening, extra-curricular groups like pep band could not meet, and performing ensembles canceled concerts.

Section IV: Overview of High School Band in Minnesota

To understand and observe how the COVID-19 pandemic may have impacted high school band programs in Minnesota, it is essential to understand the curricular and extra-curricular practices of Minnesota high school band. This section will explore the realities and programming available within Minnesota's high school band landscape. Such programming includes curricular band ensembles and extra-curricular ensembles and activities.

The predominant curricular music experience for high school students in Minnesota is that of traditional large ensembles. Traditional large ensembles include "concert band, chorus, and orchestra."⁸⁷ While school orchestras preceded bands, bands began appearing in schools around 1910.⁸⁸ The school band movement gained momentum in the 1920s as the Music School National Conference established the Committee on Instrumental Affairs to investigate the state of instrumental music throughout the country.⁸⁹ The establishment of national school band contests in 1925 produced a decided standard instrumentation for school concert bands to

⁸⁶ "Music Activities and Performances," Minnesota Department of Health, 1.

⁸⁷ David Mark Berberick, "Music Opportunities in Schools Outside Traditional Large Ensembles in Minnesota: A Multiple Case Study" (PhD diss., University of Minnesota, 2014), 1.

⁸⁸ Michael L. Mark and Charles L. Gary, *A History of American Music Education* (Reston, Virginia: MENC, 1999, 2nd Edition), 305.

⁸⁹ *Ibid.*, 301.

“approximate...the tonal range of the symphony orchestra.”⁹⁰ In Minnesota, a concert band ensemble typically consists of traditional Western instruments, including woodwind, brass, and percussion. The instruments used in bands changed very little over the last 100 years. Woodwind instruments used in high school band include flute, oboe, bassoon, clarinet, alto clarinet, bass clarinet, soprano saxophone, alto saxophone, tenor saxophone, and baritone saxophone.⁹¹ Standard concert band brass instruments include cornet, trumpet, French horn, trombone, baritone, and tuba.⁹² Concert band percussion often includes snare drum, bass drum, toms, timpani, crash and suspended cymbals, and mallet instruments such as orchestra bells, xylophone, and vibraphone.⁹³

Extra-curricular activities extend the learning experiences as part of the standard academic curriculum beyond the school day or supplement these learning experiences. Stephanie Pitts posits that. In a study of Minnesota band directors, Berberick asked that the directors report on their extra-curricular responsibilities, which included the following: jazz band, pep band, chamber instrumental, music theater, marching band, swing/show choir, orchestra, steel drum, chamber orchestra, lessons, music listening contest, non-music, band, composition, guitar club, holiday band, honor band, piano club, show choir band, Tri-M, winter drumline, and world music club.⁹⁴ Events sanctioned by the Minnesota State High School League are connected to

⁹⁰ Darren S. LeBeau, “Examining Motivations of Band Students Who Switch from Beginning to Non-Beginning Instruments: A Multiple Case Study” (PhD diss., Kent State University, 2020), 3.

⁹¹ *Ibid.*, 164.

⁹² *Ibid.*

⁹³ “Instrumentation Guide,” Conn-Selmer Division of Education, last modified 2023, accessed April 23, 2023, <https://www.conn-selmer.com/en-us/education/services/instrument-purchase-planning/instrumentation-guide>.

⁹⁴ Berberick, 80.

some extra-curricular ensembles. The Minnesota State High School League is a non-profit governing body whose mission is to provide “educational opportunities for students through interscholastic athletics and fine arts programs, and provides leadership support for member schools.”⁹⁵ The Minnesota State High School League boasts over 240,000 annual high school participants.⁹⁶ The music events hosted and adjudicated by the Minnesota State High School League include large group contest, solo and ensemble contest, instrumental jazz ensemble contest, swing show choir and vocal jazz ensemble.⁹⁷ Additionally, the Minnesota State High School League also publishes guidelines for pep bands accompanying their school teams to state tournaments.⁹⁸ The Minnesota Band Directors Association also offers guidelines on pep and marching band events and supports curricular and extra-curricular band in Minnesota.⁹⁹

The Minnesota Band Directors Association is a professional organization that assists in “the development of band directors and band programs in schools, colleges, and communities throughout the state of Minnesota.”¹⁰⁰ This organization also organizes regional and state honor bands for both concert band ensembles and jazz ensembles, along with professional development opportunities for band directors.¹⁰¹

⁹⁵ “About,” Minnesota State High School League, last updated 2023, accessed April 19, 2023, <https://www.mshsl.org/about>.

⁹⁶ Ibid.

⁹⁷ “Music,” Minnesota State High School League, last updated 2023, accessed April 19, 2023, <https://www.mshsl.org/sports-and-activities/music>.

⁹⁸ “2023 Guidelines for Bands,” Minnesota State High School League, last updated 2023, accessed April 19, 2023, <https://www.mshsl.org/2023-guidelines-bands>.

⁹⁹ MBDA Marching and Pep Band Guidelines,” Minnesota Band Directors Association, accessed April 19, 2023, <https://www.mbda.org/links/mbda-marching-and-pep-band-guidelines>.

¹⁰⁰ “About Us,” Minnesota Band Directors Association, accessed April 19, 2023, <https://www.mbda.org/about/about-us>.

¹⁰¹ “Upcoming Events,” Minnesota Band Directors Association, accessed April 19, 2023, <https://www.mbda.org/resources/month.calendar>.

Minnesota High School Music Listening Contest is an extra-curricular activity in which band students can participate. This contest “is an independent not-for-profit competition providing an ideal opportunity to enrich students’ experiences with classical, ethnic, and popular music in a fun and competitive environment.”¹⁰² The organization’s mission statement explains: “The purpose of the Minnesota High School Listening Contest is to assist teachers in their efforts to expand the music experiences of students—primarily through the use of Western Art Music, commonly referred to as classical music.”¹⁰³ High school music students in grades nine through twelve are eligible to participate and form teams of three directed by an adult coach.¹⁰⁴ Teams receive study materials and then compete in a regional tournament. The top two teams from each region advance to the state championship.¹⁰⁵ The contest hosts nearly 200 competing teams each year.¹⁰⁶

Section V: Motivational Factors in Band Participation and Enrollment

As this study focuses on band participation and enrollment, it is prudent to consult the academic literature concerning possible motivations, connections, concerns, and reasonings behind students’ enrollment and retention in curricular band classes, along with information regarding students’ attrition from band programs. In doing so, one may form research hypotheses or correlations about what may have led to possible student band enrollment changes during the

¹⁰² “The Contest: Overview,” Minnesota High School Listening Contest, accessed April 19, 2023, <https://www.musiclisteningcontest.com/the-contest.html>.

¹⁰³ “MCL History,” Minnesota High School Listening Contest, accessed April 19, 2023, <https://www.musiclisteningcontest.com/mlc-history.html>.

¹⁰⁴ “The Contest: Overview,” Minnesota High School Listening Contest.

¹⁰⁵ “The Contest: Overview,” Minnesota High School Listening Contest.

¹⁰⁶ “MCL History,” Minnesota High School Listening Contest.

COVID-19 pandemic. Aspects of attrition along with continued motivation to participate in band, such as social connection and community, extra-curricular opportunities, and participation, level of musicianship and amount of time practicing, scheduling, relationships with peers, others, with the instructor, and parental or home support, arose in the literature.

Band is an elective curricular class available to most secondary students in Minnesota. The point at which students typically join band in Minnesota is in late elementary or early middle school. From this time on until they graduate from high school, students leave the band program, known as attrition. Philip M. Hash observes: “Retaining band students from 1 year to the next is a key factor in building instrumental music programs and helping individual musicians reach their full potential.”¹⁰⁷ Hash goes on to expound on the drawbacks of attrition, stating that “many band and orchestra teachers experience high drop-out rates among students, and as a result, suffer stress and frustration due to a perceived lack of progress by the ensemble and negative perceptions of program by administrators and other stakeholders,” adding the concern that students also lose the positive benefits of music and “the likelihood that they will become lifelong musicians.”¹⁰⁸ It is possible that the No Child Left Behind Act of 2001 may have increased attrition rates. Hash cites music class enrollment figures from schools in California that show a fifty-percent decrease in student participation between 1999–2000 and 2003–2004.¹⁰⁹ Mixon suggests that up to one-third of students who begin in instrumental music programs are not retained between the first and second year.¹¹⁰ In addition to noting a decline in overall school

¹⁰⁷ Philip M. Hash, “Student Retention in School Bands and Orchestras: A Literature Review,” *Update: Applications on Research in Music Education* 40, no. 3 (June 2022): 11.

¹⁰⁸ Hash, “Student Retention,” 11.

¹⁰⁹ Hash, “Student Retention,” 11.

¹¹⁰ Kevin Mixon, *Reaching and Teaching All Instrumental Music Students* (Lanham, Maryland: Rowman and Littlefield Education, 2007): 15.

participation in music performance groups since the 1980s, Susan Green and Connie Hale note that “enrollment in a performance group such as band drops more than 50 percent from grade 7 to grades 10 through 12.”¹¹¹ Green and Hale also posit that the economic recession of 2009 led to fine arts cuts in schools, fewer students involved in secondary music classes, and a decline in attendance at musical performances.¹¹² Robert Culver proposes that a strong music program should have no more than a fifteen percent annual attrition rate.¹¹³

The community created within an ensemble may be important and beneficial to participation and students’ overall health and well-being and a motivator for students to continue enrolling in instrumental music. Albert Jackson suggests that “peer support and peer tutoring may help students feel more comfortable in a classroom, and thus motivate them to engage actively in music-making and performance.”¹¹⁴ Debbie Rohwer notes that “social benefits are an integral part of playing in a music ensemble.”¹¹⁵ Research conducted by Patricia Campbell, Claire Connell, and Amy Beegle showed that adolescents reported that “being involved in music provided them with a sense of belonging.”¹¹⁶ Within their national sample study of American adolescents, “music emerged as significant...for its fulfillment of their emotional and social

¹¹¹ Susan K. Green, and Connie L. Hale, “Fostering a Lifelong Love of Music: Instruction and Assessment Practices that Make a Difference,” *Music Educators Journal* 98 no. 1 (September 2011): 45.

¹¹² Green and Hale, “Fostering a Lifelong Love of Music,” 45.”

¹¹³ Robert Culver, *What Makes a Strong Program: Revealing the Obvious* (Michigan: The University of Michigan, Ann Arbor, 1990).

¹¹⁴ Albert L. Jackson, “The Effect of an Attrition Intervention Program on Middle School Band Students: An Action Research Study,” (EdD. diss., Capella University, 2017): 39.

¹¹⁵ Debbie Rohwer, “The Social Nature of Band Participation: Perceptions and Program Development,” *Journal of Band Research* 53, no. 1 (Fall 2017): 17.

¹¹⁶ Patricia Shehan Campbell, Claire Connell, and Amy Beegle, “Adolescents’ Expressed Meanings of Music in and Out of School,” *Journal of Research in Music Education* 55, no. 3 (Fall 2007): 230.

needs and its function in distracting them from engagement in the various inappropriate social behaviors that are so readily available to divert them from the fullest and most wholesome development.”¹¹⁷ Laura Huhtinen-Hildén and Jessica Pitt assert that “bonding and belonging through music are fundamental to our human nature, which makes the group learning context a fruitful and interesting environment.”¹¹⁸

Extra-curricular music opportunities offer students benefits and “rich potential for positive youth development.”¹¹⁹ Andrea Creech, Maria Varvarigou, and Susan Hallam posit that extra-curricular music programs “engage young people in learning and discovering their musical, personal and social potential, irrespective of personal, socioeconomic or cultural factors or prior skills and competencies.”¹²⁰ Through a longitudinal study involving secondary students participating in extra-curricular music programs, Beatriz Ilari et al. suggest that involvement in these programs “had a positive effect” and that “the programs may have produced some positive socioemotional effects.”¹²¹ Clarence Ng indicates that social factors and parental support are important considerations that affect students’ motivation to participate in extra-curricular music programs.¹²²

¹¹⁷ Campbell et al., 233.

¹¹⁸ Laura Huhtinen-Hildén and Jessica Pitt, *Taking a Learner-Centered Approach to Music Education: Pedagogical Pathways*, (Boca Raton, Florida, 2018): 33.

¹¹⁹ Andrea Creech, Maria Varvarigou, and Susan Hallam, *Contexts for Music Learning and Participation: Developing and Sustaining Musical Possible Selves*, (Cham, Switzerland: Palgrave Macmillan, 2020), 107–108.

¹²⁰ Creech et al., 108.

¹²¹ Beatriz Ilari, et al., “The Role of Community-Based Music and Sports Programmes in Parental Views of Children’s Social Skills and Personality,” *International Journal of Community Music* 12, no. 1 (2019): 48.

¹²² Clarence Ng, “Australian Primary Students’ Motivation and Learning Intentions for Extra-Curricular Music Programmes,” *Music Education Research* 19, no. 3 (2017): 286.

The amount of time students spend practicing their instruments, and students' perceptions of their own musical proficiency and achievement, may impact their motivations to continue in music. Research by Ng suggests that an "important difference between continuing and discontinuing students was their reported time on practice" and that "deliberate practice is the most important element in developing music expertise."¹²³ In conducting a study on band enrollment factors, Adrian T. Gibson reported that participants "indicated that those who decided to discontinue band enrollment were more concerned about practice time than those who intended to continue band participation."¹²⁴ "Achievement Goal Theory" is worth considering, as the model focuses on two orientations of student motivation, grade (performance) orientation which is based on extrinsic motivation, and learning (mastery) orientation, which is based on intrinsic motivation.¹²⁵ Green and Hale suggest that grade orientation is the prevalent model in most classrooms and only works well for high-performing students at the top of the class.¹²⁶ However, learning (mastery) orientation finds students spending more time on difficult tasks, having more positive attitudes towards the subject matter, being more willing to engage in challenging tasks, and using deep-level processing strategies.¹²⁷ Of learning orientation, Neal Glenn, William McBride, and George Wilson posit: "True motivation is self-motivation. In a music class, the highest form of motivation is a desire to learn music. The student who performs

¹²³ Ng, "Australian Primary Students' Motivation," 287.

¹²⁴ Adrian T. Gibson, "Students' Perceptions of High School Band Programs, Their Marching Bands, and Factors That Lead to Intended Enrollment in These Ensembles," (PhD diss., Georgia State University, 2016), 94.

¹²⁵ Green and Hale, "Fostering a Lifelong Love of Music," 46.

¹²⁶ Ibid.

¹²⁷ Tim Urdan and Erin Schoenfelder, "Classroom Effects on Student Motivation: Goal Structures, Social Relationships, and Competence Beliefs," *Journal of School Psychology* 44 (April 2006): 334.

well is generally the student who practices without pressure. He establishes his own goals and attains them. He constantly evaluates his own progress.”¹²⁸

Empirical evidence shows that a school’s schedule may also affect band program attrition. Jackson posits that students lose interest in band during the school day due to “academic inconvenience”—or, more specifically, when a school’s “academic structure is built to appease academic requirements and does not support the band program.”¹²⁹ Scheduling may create issues that impede students from continuing in music courses, admit Peter Gouzouasis, Julia Henry, and George Belliveau.¹³⁰ Hash notes that block scheduling, “which involves longer class periods that meet fewer times each week,” may lead to attrition in music ensembles. Initial research around the turn of the century, cited by Hash, indicated that “73% of these schools following these types of schedules experienced an average decrease of 31% in instrumental music enrollment” and that “69% of high school music teachers from 13 states reported diminished enrollment due to course conflicts after their institutions adopted block schedules.”¹³¹ Vicki D. Baker investigated the effect of high school scheduling patterns and students enrolled in music ensembles. Baker found students self-reported that “course conflicts are the most common obstacles to scheduling music ensemble classes.”¹³² Baker found evidence that the scheduling of

¹²⁸ Neal E. Glenn, William B. McBride, and George H. Wilson, *Secondary School Music: Philosophy, Theory, and Practice* (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1970): 75.

¹²⁸ Green and Hale, “Fostering a Lifelong Love of Music,” 46.

¹²⁹ Jackson, “The Effect of an Attrition,” 34.

¹³⁰ Peter Gouzouasis, Julia Henry, and George Belliveau, “Turning Points: A Transitional Story of Grade Seven Music Students’ Participation in High School Band Programmes,” *Music Education Research* 10, no. 1 (March 2008): 77.

¹³¹ Hash, “Student Retention,” 12.

¹³² Vicki D. Baker, “Scheduling Accommodations Among Students Who Persist in High School Music Ensembles,” *Journal of Music Teacher Education* 18, no.2 (April 2009): 14.

college preparatory programs, such as Advanced Placement (AP) courses that allow students to receive college credit in high school, are of “major concern” for college-bound music students.¹³³ Participants in Baker’s study reported that “school counselors, who are primarily responsible for assisting [students] in scheduling classes, often pressure them to enroll in AP classes in order to obtain college credits.”¹³⁴ Baker also suggests that an increased number of students taking AP courses and courses in the International Baccalaureate program (IB) alongside music programs is “complicated by restrictions caused by block scheduling.”¹³⁵

The influence of others, including parents, other family members, teachers, and peers, may be a factor in whether or not students continue in instrumental music. Jackson believes that “parental influence is an important external factor affecting student motivation and persistence.”¹³⁶ Many see music teachers as having a unique role in students’ lives due to “opportunities to create more meaningful musical learning for students by combining in-school and out-of-school musical experiences and involving parents in music instruction.”¹³⁷ Gouzouasis, Henry, and Belliveau indicate that if parents have a supportive attitude toward their child’s musical efforts, the child is likely to remain involved. Conversely, students may perceive that their music class is not as important as other subjects if parents do not treat it with the same weight as other subjects.¹³⁸ A survey of band students conducted by Gibson found that students

¹³³ Ibid.

¹³⁴ Ibid., 14.

¹³⁵ Ibid., 8.

¹³⁶ Jackson, “The Effect of an Attrition,” 39.

¹³⁷ Ibid.

¹³⁸ Gouzouasis et al., “Turning Points,” 77.

indicated that “the influences of friends, parents, and band directors were important in deciding to continue participation in band during high school.”¹³⁹ Gibson’s findings also indicate that students outside of band may influence band retention, as his analysis of survey responses “indicated that bullying is an important factor in predicting students’ intended decision to participate in band.”¹⁴⁰ Gibson also found that students who had friends in band could negatively influence continued band enrollment in some cases, especially in cases where students do not feel accepted or welcomed by their band colleagues or feel that their band peers created a hostile or bullying experience for them in band.¹⁴¹

There may be additional factors that influence the retention of band students. Gouzouasis, Henrey, and Belliveau suggest that a key to retaining music is support from teachers and administrators.¹⁴² They also advise that a lack of communication between high school music teachers and middle-level students may impede retention.¹⁴³ Hash suggests that “students in underserved schools might drop out at an even higher rate” than those in higher socioeconomic status areas, based on a study among “low-income and ethnically diverse learners in Miami, Florida.”¹⁴⁴ Research by Gibson found that gender may play a role in retention: “Analysis indicated that males are less likely to continue band participation when compared with females.”¹⁴⁵ Another possible factor that may affect students’ desire to remain in band is that of

¹³⁹ Gibson, 93.

¹⁴⁰ Ibid.

¹⁴¹ Ibid., 96.

¹⁴² Gouzouasis et al., “Turning Points,” 77.

¹⁴³ Ibid., 79.

¹⁴⁴ Hash, “Student Retention,” 12.

¹⁴⁵ Gibson, 93.

the repertoire that is rehearsed and performed. A study by Gibson found that repertoire performed in band class was an important aspect of band participation.¹⁴⁶ His study observed that “students did not feel as though band directors understood their desire to perform music that is more popular among themselves,” with Gibson claiming, “the study participants viewed the repertoire selection of band programs as outdated and not representative of their generation.”¹⁴⁷

Summary

The research presented in this chapter outlined the realities facing the field of education during the COVID-19 pandemic, realities specific to education in the state of Minnesota during the COVID-19 pandemic, realities specific to teaching band in Minnesota during the COVID-19 pandemic, an overview of high school band in Minnesota, and an investigation into motivational factors that affect band participation and enrollment. To this date, there is limited research exploring the COVID-19 pandemic’s effects on band enrollment in Minnesota and directors’ perceptions of how the COVID-19 pandemic affected their band programs. The current study aims to address this gap in the academic literature by comparing Minnesota band enrollment data from before and after the COVID-19 pandemic began and by surveying Minnesota band directors to investigate their perceptions of whether the COVID-19 pandemic influenced their band programs.

¹⁴⁶ Ibid., 97.

¹⁴⁷ Ibid., 98.

Chapter Three: Methodology

Introduction

This convergent parallel mixed methods study was designed to collect quantitative and qualitative data to determine how band enrollment changed following the onset of the COVID-19 pandemic and investigate band directors' perceptions of how the COVID-19 pandemic affected their programs. The researcher selected a convergent parallel mixed method approach to gain a deeper understanding of the data by utilizing a survey that included both quantitative elements and qualitative follow-up questions to help inform and validate quantitative results.¹⁴⁸ Creswell and Creswell define mixed methods research as a design that “incorporates elements of both qualitative and quantitative approaches.”¹⁴⁹ This study employed a convergent mixed methods approach, as the design “converges or merges quantitative and qualitative data in order to provide a comprehensive analysis of the research problem” and is considered parallel, as the researcher executed both parts of the study at roughly the same time.¹⁵⁰

In the first quantitative part of the study, the researcher requested Minnesota high school population and band enrollment data to analyze. The researcher requested data directly from the Minnesota Department of Education (MDE) to obtain this information.¹⁵¹ The Freedom of Information Act (FIOA) made this data available to the public through.¹⁵² The researcher focused

¹⁴⁸ John W. Creswell and J. David Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 5th ed., (Thousand Oakes, California: Sage Publications, INC., 2018): 127.

¹⁴⁹ *Ibid.*, 3.

¹⁵⁰ *Ibid.*, 15.

¹⁵¹ “About MDE: Data Requests,” Minnesota Department of Education, accessed June 7, 2021, <https://education.mn.gov/MDE/About/MDE086069>.

¹⁵² “About FIOA,” Freedom of Information Act, last modified March 15, 2023, accessed March 23, 2023, <https://www2.ed.gov/policy/gen/leg/foia/foiatoc.html>.

on high school band programs to eliminate the challenge of determining when students begin band in elementary or middle school, as this varies from district to district. The data requested also included qualifiers laid out by Hash's study on remote learning in band, considering demographic information, which included school locations and poverty levels.¹⁵³

The researcher conducted the second part of the study as a follow-up to the quantitative results to help inform the quantitative results. Minnesota high school band directors were surveyed to collect relevant data. The survey development included questions designed to inform upon the statistical enrollment data requested from the state in the first part of the study. This data was collected and analyzed for common themes, then compared against the quantitative data from schools to examine whether band directors' perceptions of participation levels align with the statistical data collected.

Design

The first part of the study was descriptive and reported quantitative data. As Kenneth Phillips notes: "Descriptive research presents information on one group or compares factors between or among groups and determines trends, needs, or changes."¹⁵⁴ The primary factor being studied in this project is the enrollment of high school students in Minnesota band programs, measured annually. The factor to which high school band enrollment in Minnesota is being compared is the onset of the COVID-19 pandemic, which occurred in the spring of 2020.

¹⁵³ Hash, "Remote Learning," 384.

¹⁵⁴ Kenneth H. Philips, *Exploring Research in Music Education and Music Therapy* (New York: Oxford University Press, 2008), 155.

To determine the relationship between the two factors, high school band enrollment data were obtained from the Minnesota Department of Education.¹⁵⁵ This data was then reviewed and analyzed to ensure a complete dataset. Schools that did not have complete datasets for each year from of 2015–2021 were omitted. The purpose of looking at the data beyond the change in the 2019–2020 and 2020–2021 school years was to determine whether any increase or decrease in band participation was within a normal range.

The second part of this convergent parallel mixed methods study was quantitative and qualitative. The primary purpose of this part of the study was to empirically evaluate the lived experience of Minnesota band directors as an additional instrument to inform and evaluate the statistical data collected in the first part of the study.

An internet-based survey was used to collect Minnesota band directors' perspectives. The researcher constructed the survey considering Creswell and Creswell's outline of survey design and rationale.¹⁵⁶ The researcher chose a cross-sectional internet-based survey as the preferred method of data collection. A cross-sectional design is one with which "the data is collected at one point in time."¹⁵⁷ An internet-based survey was chosen due to the economy of the design, the accessibility to technology, the ease of distribution, the rapid turnaround in data collection, and the connected analytical tools. Due to the nature of the study, other designs were not pursued due to logistical and economic constraints, such as determining and tracking down every possible Minnesota Band director who had taught during the given timetable and then delivering a paper

¹⁵⁵ "About MDE: Data Requests," Minnesota Department of Education, accessed June 7, 2021, <https://education.mn.gov/MDE/About/MDE086069>.

¹⁵⁶ Creswell and Creswell, *Research Design*, 149.

¹⁵⁷ Ibid.

survey, along with the costs of doing so. The survey results were then compared to the data from the first part of the study.

Questions and Hypotheses

The first part and second part of this study were designed based on the following research questions:

1. In what ways did the COVID-19 pandemic impact participation in high school band programs in Minnesota?
2. What are the perceptions of Minnesota band directors on the possible impact of the COVID-19 pandemic on their band programs?

Based on the review of the available literature, the study aims to support the following hypotheses:

1. The COVID-19 pandemic impacted participation in high school band programs in Minnesota in terms of enrollment, program size, and program offerings.
2. Minnesota band directors perceive and report that the COVID-19 pandemic reduced program enrollment, reduced band FTE in their schools, and reduced or delayed musical ability in their performing ensembles.

Participants

For the first part of the study, the researcher contacted the Minnesota Department of Education and requested band enrollment data from Minnesota public high schools from 2015–2021. The researcher discovered that while the state keeps statistical data, not all schools report yearly data. Secondary schools that housed students in any combination of grades 9–12, which includes junior high schools (grades 7–9), senior high schools (grades 9–12 or 10–12), and

combined (grades 7–12), were considered for this study. As of the 2021–2022 school year, 479 schools fit this description.¹⁵⁸ Of the data given by the Minnesota Department of Education, 34.9% ($N = 167$) of schools had complete datasets from 2015–2021 and were included in this analysis of the total possible secondary schools in the state. Of these schools, forty-two percent (42%; $n = 139$ of 331) of Minnesota school districts are represented in the data set.

The second part of the study included Minnesota band directors. The specific inclusion criteria stated that participants must be 18 or older and must have taught in a Minnesota high school band program during the 2019–2020 and 2020–2021 school year (see Appendix D). The survey was voluntary; the first page gave participants informed consent information (see Appendix C). The researcher posted the survey criteria and link on the Minnesota Band Director Facebook group and emailed individual band directors by looking up email addresses on district websites.¹⁵⁹ Seventy-seven band directors participated in the study ($N = 77$). Considering a maximum potential of 479 Minnesota high school band programs, the researcher estimated that the director survey represented sixteen percent (16%) of these programs.

Setting

The subjects completed the online survey from April 21, 2022, until June 3, 2022, at their leisure. The risks involved in the study were minimal, equal to the risks the participants would encounter in everyday life. Using an online platform, participants could take the survey within their natural setting.

¹⁵⁸ “Schools, Districts and Teachers at a Glance,” Minnesota Department of Education Data Center, accessed July 4, 2022, <https://public.education.mn.gov/MDEAnalytics/Summary.jsp>.

¹⁵⁹ “MN Band Directors,” Facebook private group, accessed July 4, 2022.

All participants taking the survey remained anonymous. The Google form did not request names, email addresses, or other information allowing personal identification. The researcher kept all records private and stored them securely in a password-locked account and on a password-locked computer that is only accessible to the researcher.

Instrumentation

The survey instrument developed for the second part of the study included three sections with forty questions to measure band directors' perceptions of how the COVID-19 pandemic may have affected their band programs. The survey employed a five-point Likert-type scale, with free-response opportunities for participants to qualify their answers. This allowed directors to offer additional insights, information, or factors not covered in the provided questions.

The researcher chose to use a five-point Likert-type scale for this survey as it is a commonly used tool within the social sciences to measure participant attitudes. The Likert scale was created in 1932 to measure "attitude in a scientifically accepted and validated manner."¹⁶⁰

Ankur Joshi et al. explain the original Likert scale:

The original Likert scale is a set of statements (items) offered for a real or hypothetical situation under study. Participants are asked to show their level of agreement (from strongly disagree to strongly agree) with the given statement (items) on a metric scale. Here all the statements in combination reveal the specific dimension of the attitude towards the issue, hence, necessarily inter-linked with each other.¹⁶¹

The scale includes a measure of neutrality and/or undecided occurs between agree and disagree.¹⁶² In addition to In exploring the history of the Likert scale, Diane Edmondson explains

¹⁶⁰ Ankur Joshi, Saket Kale, Satish Chandel, and D. Kumar Pal, "Likert Scale: Explored and Explained," *British journal of applied science & technology* 7, no. 4 (2015): 397.

¹⁶¹ Ibid.

¹⁶² Diane Edmondson, "Likert Scales: A History," *Proceedings of the Conference on Historical Analysis and Research in Marketing* 12, (2005): 129.

that a weakness of this measure is that it is “assumed to be on an interval scale with which statistical properties such as the mean can be justifiably used.”¹⁶³ Edmondson argues against this type of interval analysis, as “this assumption is never mentioned in the original Likert study” and that “this assumption is down right [sic] incorrect.”¹⁶⁴ Susan Jamison explains that Likert scales use ordinal measurement, “that is, the response categories have a rank order, but the intervals between values cannot be presumed equal.”¹⁶⁵ The researcher chose a five-point Likert-type scale for this survey, as it is a commonly used variation of the scale¹⁶⁶ which is observed in the surveys on music and COVID-19 conducted by Shaw and Mayo,¹⁶⁷ and Hash.¹⁶⁸

The survey was titled “Minnesota High School Band Directors’ Perceptions on the Effects of the COVID-19 Pandemic on Their Band Programs: Academic Survey.” A Google Form was used to create a survey for Minnesota band directors (see Appendix D).¹⁶⁹ The researcher chose this format due to its accessibility, cost, the ability to distribute electronically via email and social media easily, and built-in analytical tools. The survey consisted of three sections, the first focusing on enrollment in participants’ band programs, the second focusing on program offerings, and the third focusing on band teacher FTE. Questions utilized a five-option Likert-type scale (Strongly Disagree to Strongly Agree), similar to a national survey by Shaw

¹⁶³ Edmondson, 129.

¹⁶⁴ Ibid.

¹⁶⁵ Susan Jamieson, “Likert Scales: How To (ab)use Them?” *Medical education* 38, no. 12 (April 2004): 1217.

¹⁶⁶ Ibid.

¹⁶⁷ Ryan D. Shaw and Whitney Mayo, “Music Education and Distance Learning During COVID-19: A Survey,” *Arts Education Policy Review* 123, no. 3 (2022): 145.

¹⁶⁸ Hash, 385.

¹⁶⁹ “Google Forms: About,” Google, accessed July 4, 2022, <https://www.google.com/forms/about>.

and Mayo.¹⁷⁰ Due to some respondents not answering every question in this previous study, the Google Form survey option enabling the feature requiring all Likert-type questions to be complete before submission is possible was engaged.¹⁷¹ Due to this feature, every Likert-type question was completed on all collected surveys.

Following Hash's example, the survey developed for this study also included optional open-ended response areas for participants to "elaborate on their responses or share other thoughts" based on the closed-ended Likert-type questions provided.¹⁷² Eleanor Singer and Mick P. Couper believe that employing open-ended survey questions to closed-ended questions offers benefits, which include gathering a more extensive range of possible responses and offers easier facilitation of "automatic transcription or computer-assisted coding" that can "provide a useful addition, and in some cases an alternative, to a small number of qualitative interviews administered to convenience samples" to establish the validity of closed-ended questions.¹⁷³ Themistoklis Altintzoglou et al.'s work supports using open-ended questions as offering qualitative elements into a quantitative survey, which they claim "increased the validity and usability of the results without dramatically increasing the effort in data collection and analysis."¹⁷⁴

¹⁷⁰ Shaw and Mayo, 145.

¹⁷¹ Ibid.

¹⁷² Hash, "Remote Learning," 385.

¹⁷³ Eleanor Singer, and Mick P. Couper, "Some Methodological Uses of Responses to Open Questions and Other Verbatim Comments in Quantitative Surveys," *Methoden, Daten, Analysen mda; Zeitschrift für Empirische Sozialforschung* 11, no. 2 (2017): 117.

¹⁷⁴ Themistoklis Altintzoglou, Izumi Sone, Gøril Voldnes, Bjørg Nøstvold, and Geir Sogn-Grundvåg, "Hybrid Surveys: A Method for the Effective use of Open-Ended Questions in Quantitative Food Choice Surveys," *Journal of International Food & Agribusiness Marketing* 30, no. 1 (2018): 57.

The survey questions were designed based on the findings related to issues in the literature, as outlined in chapter two of this study. The researcher developed the first section of the director survey to compare to the enrollment data gathered in part one of the study. This section focused specifically on band program enrollment and allowed directors to indicate whether their band program enrollment decreased, stayed the same, or increased. Participants who indicated that enrollment stayed the same or decreased then answered follow-up questions about their belief about how specific pandemic-related factors, taken from the literature in chapter two, affected an enrollment change. Participants that indicated an increase in enrollment skipped these questions as a design of the survey and continued to the next section.

Procedures

To begin the data collection portion of the study, the researcher contacted and communicated with representatives at the Minnesota Department of Education as outlined in the procedures given on the MDE website.¹⁷⁵ The researcher emailed individuals at the Minnesota Department of Education to clarify the specific data requested and the timeline for obtaining said data. The requested data included statewide band enrollment by the entire state for 2015–2021 by classification/region, district, school, and grade level (9, 10, 11, 12). The state specified that the data given was only for credit-awarding classes, which would not include band programs that are extra-curricular or not part of a standard curricular course. The Department did not have a way to separate the schools into urban/rural/suburban designations based on the NCES location codes but instead identified whether a school was located within the seven-county metro area (centered

¹⁷⁵ “Data Requests” Minnesota Department of Education.

around the population center of Minneapolis/St. Paul) or outside of this area.¹⁷⁶ Due to the number of requests the MDE usually handles, the researcher waited over one month before the data was provided.

The data collection in the first part of the study used Microsoft Excel to organize and deliver Data. The data review employed Microsoft Excel because the Minnesota Department of Education delivered the requested data in this format. The researcher analyzed the data using analysis functions included within the program and then transferred results to Google Sheets to create visual representations of this data.

The researcher received the data from MDE and began reviewing and organizing the data from MDE into complete datasets. While statewide and regional data was requested and supplied, analysis of data from individual schools and districts showed that the statewide and regional data was incomplete, as not every school or district had reported each year, thus comparing this generalized data from year to year inaccurate. In the analysis, the researcher removed any school that did not report data for each year observed to create a more reliable dataset. After analysis, the study used data from 167 public Minnesota high schools ($N = 167$) representing 139 Minnesota school districts in the 2015–2021 dataset. Data points that guided the organization included band enrollment at each grade level (9–12) and the total student population at each grade level. The researcher used these numbers to view participation in band as a percentage of the total student population in each grade to get a more accurate measure. The analysis looked at trends from the fall of the 2015–2016 school year to the fall of the 2021–2022

¹⁷⁶ “Seven-County Twin Cities Region Surpassed 3 Million People in 2015,” Minnesota State Demographic Center, March 24, 2016, accessed April 2, 2023, <https://mn.gov/admin/demography/news/media-releases/?id=36-250801>.

school year based on total participation, grade level participation, and graduating class participation.

All trends also explored the total participation and that of metro and non-metro schools. While the initial request for data included having schools labeled with their NCESIDs classifications of urban, suburban, and rural, MDE currently only classifies schools as a part of the seven-county metro area or outside of it, so the data received was labeled and reviewed as such. The seven-county metro area includes Hennepin County, Ramsey County, Washington County, Dakota County, Scott County, Carver County, and Anoka County and is based around the Minneapolis and St. Paul metro area.¹⁷⁷ MDE also separated data into subsets based on their metro and non-metro designation.

To formally begin the survey portion of the study, the researcher first completed the Collaborative Intuitional Training Initiative (CITI), a required training designed for Social and Behavioral Researchers (see Appendix A). Upon completing CITI and receiving certification, the researcher drafted the documents necessary for Liberty University's Institutional Review Board (IRB) to review and grant permission for approval of the study (see Appendix B). After the appropriate revisions, the IRB approved the study and survey questions. The researcher then posted the study on the Facebook group "MN Band Directors" on April 23, 2022, using the pre-approved social media release (see Appendix E). Over the next month, the researcher compiled the email addresses of high school band directors in Minnesota from Minnesota district websites, then sent emails inviting these individuals to participate in the survey utilizing the pre-approved email release (see Appendix F). Both forms included the participant eligibility requirement of

¹⁷⁷ Minnesota State Demographic Center, "Seven-County Twin Cities Region."

being a band director during the 2019–2020 school year or the 2020–2021 school year. The survey was closed on June 3, 2022, with seventy-seven participants ($N = 77$).

The first page of the survey included the informed consent form, which participants needed to read and to which they needed to agree before beginning the survey (see Appendix C).

The informed consent form included the following eligibility requirements:

1. Participants must be 18 years of age or older, and
2. Participants must have taught in a Minnesota high school band program during the 2019-2020 and/or 2020-2021 school year.

The informed consent outlined the purpose of the study to collect information on how the COVID-19 pandemic may have affected high school band programs in Minnesota. The document clarified that there were no direct benefits to participants and that the study would include a general benefit to society, including a further understanding of how the COVID-19 pandemic may have affected high school band programs in Minnesota. An explanation of the study was also included, along with the estimated five to ten minutes to complete the survey. The document outlined potential risks which were determined to be minimal (meaning they are equal to the risks participants would encounter in everyday life). Participation in the study was voluntary, and there was no compensation. Participants were also informed about the protections of their personal information, which made clear that records would remain private and stored securely, with only the researcher having access to said records, and that:

1. Participant responses are anonymous. No names or identifying information is collected by this survey.

Data is stored on a password-locked computer, and results could be used to facilitate future presentations or research.

Survey Questions

The researcher developed survey questions based on the factors related to the COVID-19 pandemic identified in the literature review. To create survey questions, the researcher reviewed and considered existing academic and non-academic surveys based on measuring music teachers' perceptions, experiences, and attitudes during the COVID-19 pandemic. Survey data consisted of participant selections from the checklists provided about factors affecting Minnesota high school band program enrollment and answers in a free-response format about factors that may not have been considered in the initial provided Likert-type response options. The researcher sent the initial survey instrument, in the form of a pilot study, to music educators ($n = 5$) from around the state of Minnesota, which included middle and high school band directors, middle school and high school choir directors, and a college music professor, to establish validity for this descriptive study. These individuals suggested changes, additional questions, and rewording, which resulted in the final instrument. Data were tabulated and measured in terms of frequencies and percentages of total respondents.

The survey used a nonprobability sample due to the availability of participants. Creswell and Creswell explain this type of sampling, also known as a convenience sample, where "respondents are chosen based on their convenience and availability."¹⁷⁸ The survey did not collect personally identifiable data on participants to maintain anonymity. The survey was divided into three areas, correlating with the hypothesis of this study which included Band Program Enrollment, Band Programming Offerings, and Band Director FTE (see Appendix D).

¹⁷⁸ Creswell and Creswell, *Research Design*, 150.

The first section, Band Program Enrollment, was directly correlated to the data collected in the first part of the quantitative study. The first question asked was whether the participant believed that the COVID-19 pandemic affected their band program's enrollment between the 2019–2020 (pre-pandemic) school year and the 2020–2021 school year. Participants then chose the response they believed best answered the question set in a five-option Likert-type scale, where the respondents could choose between the following: Significant Decrease in band program enrollment, Slight Decrease in band program enrollment, No Impact/no increase in band program enrollment, Slight Increase in band program enrollment, or Significant Increase in band program enrollment.

The survey design allowed for divergent tracks based on participants' responses. Participants could then elaborate on their responses if they indicated that their band programs had an increase in enrollment or no impact/decrease in enrollment. The researcher decided to include the options of increase in enrollment and no impact/decrease in enrollment to increase validity by including "measurement of negative or discrepant information that runs counter to the themes," as described by Creswell and Creswell.¹⁷⁹ The participants that indicated an increase in enrollment were given a free-response option that allowed them to detail their perceived reason for an increase in their band program's enrollment from the 2019–2020 school year to the 2020–2021 school year. The participants that indicated a decrease or no perceived impact or noticeable increase or decrease in their band program enrollment between the 2019–2020 and 2020–2021 school years were given a list of twenty-one factors to rate on a five-point Likert-type scale. The survey asked this group of participants to rate each factor based on how each affected the change in their band program's enrollment between the 2019–2020 school year and the 2020–2021

¹⁷⁹ Creswell and Creswell, *Research Design*, 201.

school year. The final factor option participants on this track answered was that of “Other Factors” that were not included in the survey. This factor was followed by an open-ended free-response area for participants to qualify any other not-included factors they believe led to a decrease in their band program’s enrollment.

After completing the first section of the survey, all participants responded to the same questions in the second section, which focused on changes in band program curricular offerings during the COVID-19 pandemic. Directors answered questions about the impact that the COVID-19 pandemic had on their band program’s curricular offerings between the 2019–2020 and 2020–2021 school years. Participants began this section by indicating on a Likert-type scale whether they believed the COVID-19 pandemic impacted their band program’s curricular offerings between the 2019–2020 and 2020–2021 school years. The response options given were significant reduction in curricular program offerings, slight reduction in curricular program offerings, no effect/no noticeable impact on curricular program offerings, slight increase in curricular program offerings, and significant increase in curricular program offerings. The second question in this section asked participants how their curricular programs were affected based on increased or decreased sections or curricular programming, which included program eliminated, program reduced/fewer sections or ensembles offered, no change in programming, existing program increased/more sections offered, new program, courses or ensembles added, and other. The survey offered an open-ended free-response area for directors to qualify their answer for choosing the “other” option.

Section two also asked participants how standard band-related extra-curricular programs were affected by the COVID-19 pandemic between the 2019–2020 and 2020-2021 school years. These areas included jazz band, marching band, pep band, pit orchestra, solo/ensemble contest,

music listening contest, drumline, percussion ensemble, and an “other” option, with a free-response space for participants to qualify their response. Participants responded to each area based on a Likert-type scale that included whether the program area was removed, reduced, no change/not applicable, increased, or if programming was added.

All participants then responded to the third section of the survey, which focused on band director FTE. The first question asked if the respondent’s high school, grades 9–12, experienced any changes in band director FTE between the 2019–2020 and 2020–2021 school years. The following two questions had band directors enter their high schools’ FTE for both the 2019–2020 and the 2020–2021 school years. The final question asked directors what they believed was the biggest factor in their school’s band director FTE change, with the following response options given: there was no change in FTE, reduced band program enrollment due to the COVID-19 pandemic, reduced band program enrollment unrelated to the COVID-19 pandemic, reduced course offerings or elimination of ensembles, change in school day schedule, declining school enrollment, added course offerings/ensembles, growing school enrollment, school consolidation, increased band program enrollment, increase due to adding online class offerings, and other. The survey offered directors a free-response section to qualify their “other” response. The final survey page allowed directors to leave the study and clear their responses, review their submission, or submit their surveys. This step concluded the survey for participants.

Data Analysis

The Minnesota Department of Education submitted the raw data for the first part of the study to the researcher in Microsoft Excel. The data points provided included data from the 2015 through 2021 school years. They had statewide data from reporting public schools’ total enrollment and band enrollment for grades nine through twelve. The researcher meticulously

reviewed this data, and removed the schools and districts which did not have complete data sets for all of the years. The purpose of considering data beyond the 2019–2020 and 2020–2021 school years was to observe if any enrollment change was uncharacteristic compared to changes in band enrollment from previous years. At the time of this writing, the researcher obtained and included data for the 2021 school year to inform a longer-term observation. To determine enrollment trends, the researcher analyzed the data to consider the average ratio of band participation to the student population each year and the average percent change from each year to the next. The study then compared the difference between the 2019-2020 and 2020-2021 school years to this standard to investigate whether any notable change occurred. Guided by Creswell and Creswell’s data analysis on single-subject (band enrollment) research designs, findings were plotted in a time series line graph, using the abscissa for the year of measure and the ordinate for band enrollment.¹⁸⁰

For the survey portion of the study, the data was collected and analyzed in Google Forms and Google Sheets. Tools within Google Sheets automatically calculated the percentages for the closed-ended questions, and the researcher utilized Google Sheets to create bar graphs to represent this data visually. As Jamieson suggests in the analysis of Likert data, it “may be described using frequencies/percentages of response in each category.”¹⁸¹ The researcher reviewed and coded the open-ended qualitative data based on Grounded Theory. “The researcher attempts to derive a general, abstract theory of a process, action, or interaction grounded in the views of the participants in a study.”¹⁸² Grounded Theory involves systematic steps, which

¹⁸⁰ Creswell and Creswell, 173.

¹⁸¹ Jamieson, 1217.

¹⁸² Phillips, 13.

include: “generating categories of information (open coding), selecting of the categories and positioning within a theoretical model (axial coding), and then explicating a story from the interconnection of these categories (selective coding).”¹⁸³ In forming codes, the researcher followed “Tesch’s Eight Steps in the Coding Process.”¹⁸⁴ Codes identify the themes that emerge from the data. The data from the quantitative portion of the study, which included the demographic inquiry and closed-ended questions from the survey, was then merged with the qualitative data from the open-ended questions in the survey to examine whether the lived experiences of Minnesota band directors were reflective of the statistical data collected.

¹⁸³ Creswell and Creswell, 198.

¹⁸⁴ Ibid., 196.

Chapter Four: Results

Section I: Minnesota Band Program Enrollment Findings

Statistics obtained from the State of Minnesota Department of Education provided a wealth of data about high school band enrollment from the fall of the 2015–2016 school year through the fall of the 2021–2022 school year. Complete datasets were included for one-hundred sixty-seven high schools from one hundred thirty-nine districts and are represented in the data. The data were analyzed for trends in overall band participation, participation based on grade level, and participation based on graduation class cohorts with complete data, which include the graduating classes of 2019, 2020, 2021, and 2022. All trends include the state total enrollment and band enrollment, and trends were broken down into subsets which include the seven-county metro area and the non-metro area.

Trends in Overall Band Enrollment

The band enrollment as a percentage of student population in Minnesota showed an overall decrease from the fall of 2015 to the fall of 2021 (see table 1 and figure 1). Enrollment numbers showed an increase from 11.425% in 2015 to a maximum of 11.975% in 2017. The greatest decrease in total band enrollment was between the fall of 2017 and 2018, with a decrease of 0.846%. The second greatest decrease was between the fall of 2020 and 2021, with a decrease of 0.765%. The lowest data point was recorded in the fall of 2021, with band enrollment being 10.241% compared to the school population. This data shows a decrease in

band enrollment following the onset of the COVID-19 pandemic. Table 1 shows the percentage of students from the total school population enrolled in band from 2015—2021.

Table 1. Band Enrollment as percentage of school enrollment by year¹⁸⁵

Year	2015	2016	2017	2018	2019	2020	2021
Band Percent of Total School Population	11.43%	11.73%	11.98%	11.13%	11.43%	11.01%	10.24%

Figure 1 shows the trend line for Minnesota school band enrollment from the year 2015 to 2021. Note the decrease in enrollment from 2019 (before the COVID-19 pandemic) to 2020 and 2021.

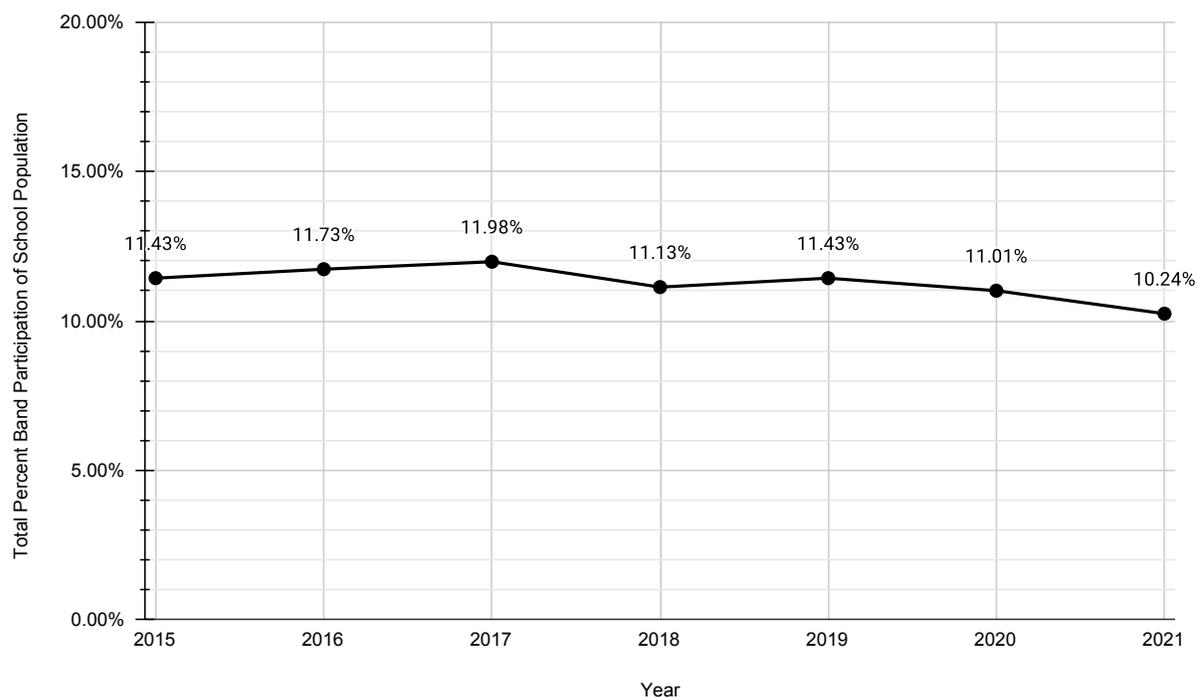


Figure 1. Minnesota high school band enrollment as a percentage of school enrollment by year.¹⁸⁶

¹⁸⁵ Table created by Matthew G. Marsolek.

¹⁸⁶ Figure created by Matthew G. Marsolek.

Trends in Overall Band Enrollment Metro and Non-Metro

The data was also analyzed broken into metro and non-metro subsets (see table 2 and figure 2). The data allows for comparison between metro and non-metro populations as well as allows for follow trends in band enrollment. Both metro and non-metro populations follow the same general trend line; however, it is notable that there is a higher percentage of non-metro students enrolled in band courses. Both populations show a decrease in band enrollment from the fall of 2019 (pre-pandemic) to the fall of 2021. Non-metro band participation dropped from 14.65% in the fall of 2015 to 13.45% in the fall of 2021, with a peak of 15.38% in the fall of 2017, for a decline of 1.2% over the seven-year sample (see table 2 and figure 2). Band participation in non-metro classes dropped by 1.41% from 14.86% in the fall of 2019 (pre-pandemic) to 13.45% in the fall of 2021. Metro ninth-grade band participation dropped from 8.52% in the fall of 2015 to 7.34% in the fall of 2021, with a peak of 8.85% in the fall of 2017, for a decline of 1.18% over the seven-year sample (see table 2 and figure 2). Band participation in metro ninth-grade classes dropped by 1.08% from 8.42% in the fall of 2019 (pre-pandemic) to 7.34% in the fall of 2021. This data shows a decrease in band enrollment following the onset of the COVID-19 pandemic. Table 2 shows the total population of students, the total band enrollment population, and the band percentage of the population for both metro and non-metro schools.

Table 2. Minnesota metro and non-metro high school band enrollment as a percentage of school enrollment by year¹⁸⁷

Year	2015	2016	2017	2018	2019	2020	2021
Metro Band Enrollment	4778	4942	4904	4643	4941	4783	4232
Metro Total Enrollment	56068	56562	55417	57886	58653	59058	57649
Band Percentage of Metro Population	8.52%	8.74%	8.85%	8.02%	8.42%	8.10%	7.34%
Non-Metro Band Enrollment	7390	7621	7831	7456	7642	7439	7004
Non-Metro Total Enrollment	50435	50588	50931	50832	51429	51991	52067
Band Percentage of Non-Metro Population	14.65%	15.06%	15.38%	14.67%	14.86%	14.31%	13.45%

Figure 2 shows the trend lines for metro and non-metro Minnesota school band enrollment from 2015 to 2021. Note the decrease in enrollment from 2019 (before the COVID-19 pandemic) to 2020 and 2021 for both subgroups. Also, note the difference in band enrollment between the metro and non-metro schools.

¹⁸⁷ Table created by Matthew G. Marsolek.

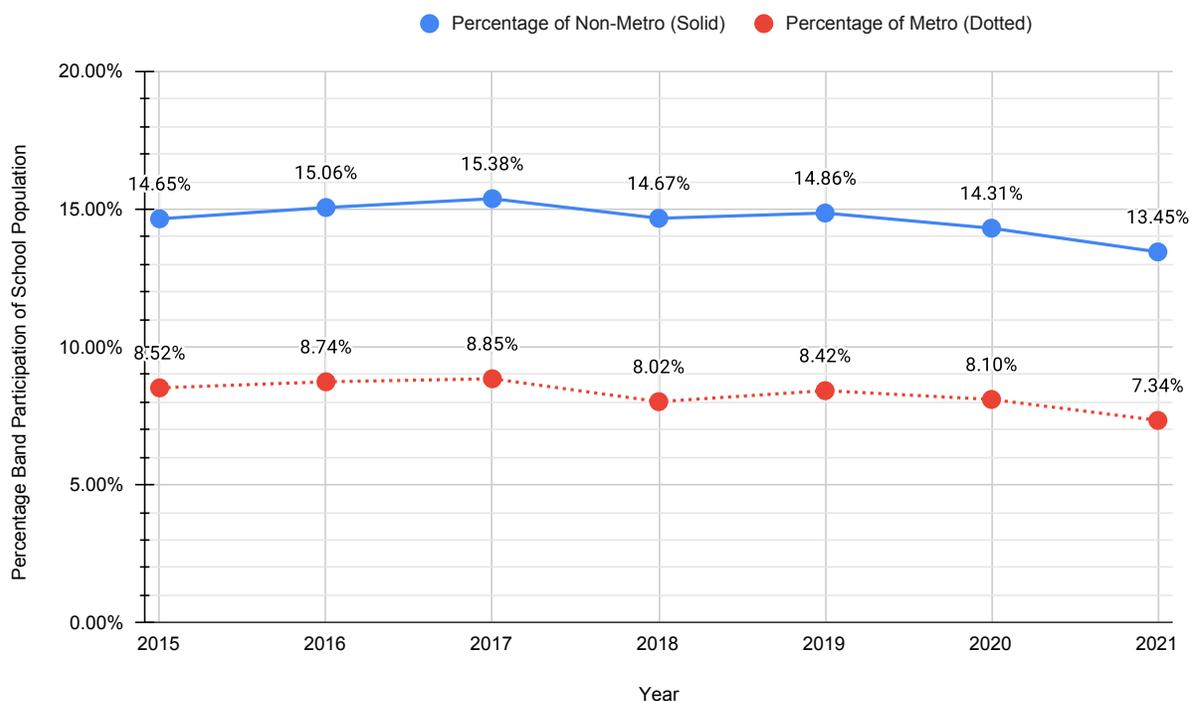


Figure 2. Minnesota metro and non-metro high school band enrollment as a percentage of school enrollment by year.¹⁸⁸

Trends Based on Grade Level

The Minnesota Department of Education provided data specific to each high school grade level. Utilizing this data, grade level trends were explored for 9th, 10th, 11th, and 12th grade. The grade level participation was measured each year using the band enrollment as a percentage of the total grade level population.

9th Grade

Data from Minnesota ninth-grade classes from the fall of 2015–2021 was obtained and analyzed. The data included each year’s ninth-grade class total population and each year’s band enrollment numbers. The percentage of population that participated in band was calculated from

¹⁸⁸ Figure created by Matthew G. Marsolek.

this data. Overall, ninth-grade band participation dropped from 15.67% in the fall of 2015 to 14.06% in the fall of 2021, with a peak of 16.05% in the fall of 2017, for a decline of 1.61% over the seven-year sample (see table 3 and figure 3). Band participation in ninth grade dropped by 1.45% from 15.51% in the fall of 2019 (pre-pandemic) to 14.06% in the fall of 2021. This data shows a decrease in band enrollment following the onset of the COVID-19 pandemic. Table 3 shows the population and percentage of ninth-grade students from the total school population enrolled in band from 2015–2021.

Table 3. Minnesota 9th grade band enrollment as a percentage of school enrollment by year¹⁸⁹

Year	2015	2016	2017	2018	2019	2020	2021
9th Band Enrollment	4421	4502	4484	4211	4679	4397	4101
9th Total Enrollment	28211	28754	27937	29075	30169	29769	29167
Band Percentage of 9 th Population	15.67%	15.66%	16.05%	14.48%	15.51%	14.48%	14.06%

¹⁸⁹ Table created by Matthew G. Marsolek.

Figure 3 shows the trend line for Minnesota school ninth-grade band enrollment from the year 2015 to 2021. Note the decrease in enrollment from 2019 (before the COVID-19 pandemic) to 2020 and 2021.

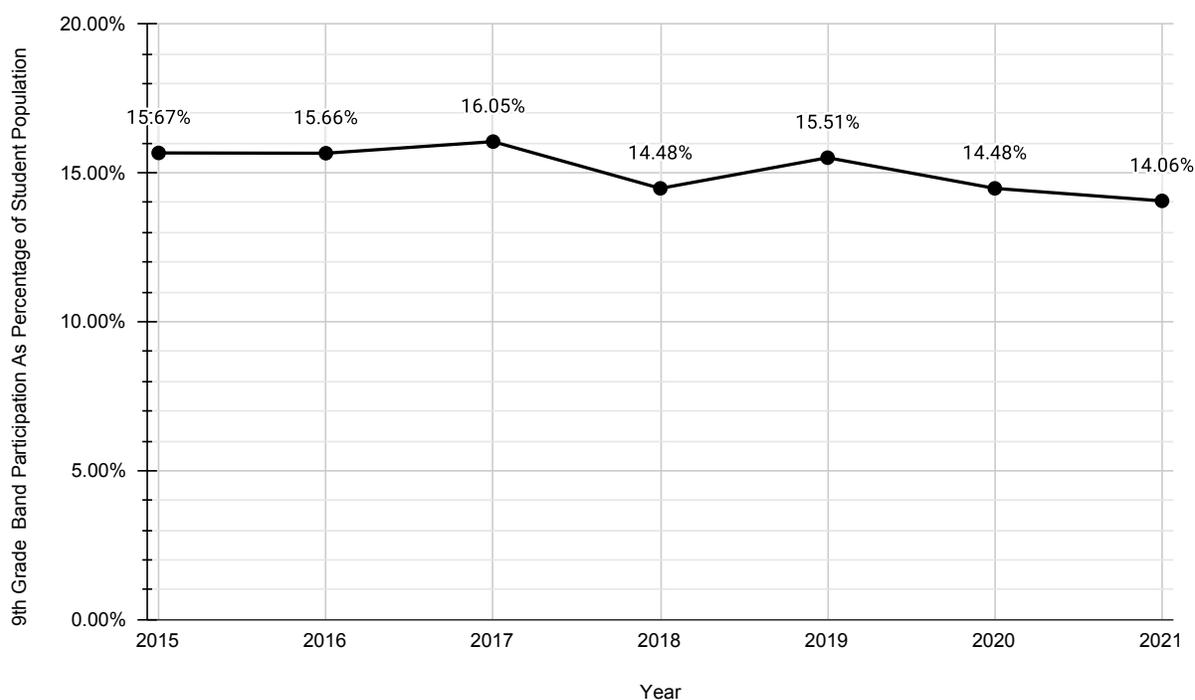


Figure 3. Minnesota 9th grade band enrollment as a percentage of school enrollment by year.¹⁹⁰

Data subsets from metro and non-metro ninth-grade classes from 2015–2021 were also analyzed and measured in the fall of each school year. The data included each year’s ninth-grade class total population and each year’s band enrollment numbers for both subsets. The percentage of population that participated in band was calculated from this data. Non-metro ninth-grade

¹⁹⁰ Figure created by Matthew G. Marsolek.

band participation dropped from 18.35% in the fall of 2015 to 17.00% in the fall of 2021, with a peak of 18.76% in the fall of 2017, for a decline of 1.35% over the seven-year sample (see table 4 and figure 4). Band participation in non-metro ninth-grade classes dropped by 1.65% from 18.65% in the fall of 2019 (pre-pandemic) to 17.00% in the fall of 2021. Metro ninth-grade band participation dropped from 13.24% in the fall of 2015 to 11.33% in the fall of 2021, with a peak of 13.54% in the fall of 2017, for a decline of 1.91% over the seven-year sample (see table 4 and figure 4). Band participation in metro ninth-grade classes dropped by 1.41% from 12.74% in the fall of 2019 (pre-pandemic) to 11.33% in the fall of 2021. This data shows a decrease in ninth-grade band enrollment following the onset of the COVID-19 pandemic. Table 4 shows the percentage of ninth-grade students from the total school population enrolled in band from 2015–2021 for both metro and non-metro schools.

Table 4. Minnesota 9th grade metro and non-metro high school band enrollment as a percentage of school enrollment by year¹⁹¹

Year	2015	2016	2017	2018	2019	2020	2021
Band Percentage of 9th Grade							
Non-Metro Population	18.35%	18.43%	18.76%	17.77%	18.65%	17.32%	17.00%
Band Percentage of 9th Grade							
Metro Population	13.24%	13.18%	13.54%	11.56%	12.74%	12.49%	11.33%

¹⁹¹ Table created by Matthew G. Marsolek.

Figure 4 shows the trend lines for metro and non-metro Minnesota ninth-grade band enrollment from 2015–2021. Note the decrease in enrollment from 2019 (before the COVID-19 pandemic) to 2020 and 2021 for both subgroups. Also, note the difference in band enrollment between the metro and non-metro schools.

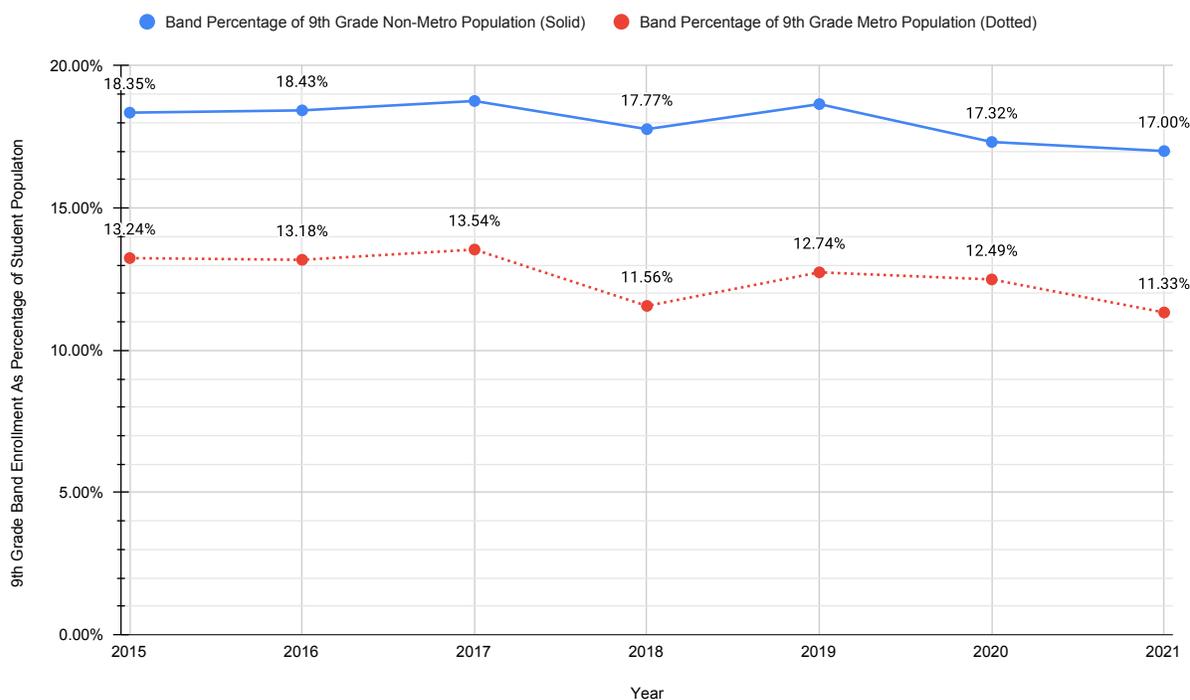


Figure 4. Minnesota 9th grade metro and non-metro high school band enrollment as a percentage of school enrollment by year.¹⁹²

10th Grade

Data from Minnesota tenth-grade classes from the fall of 2015–2021 was obtained and analyzed. The data included each year’s tenth-grade class total population and each year’s band enrollment numbers. The percentage of population that participated in band was calculated from

¹⁹² Figure created by Matthew G. Marsolek.

this data. Overall, tenth-grade band participation dropped from 11.83% in the fall of 2015 to 10.49% in the fall of 2021, with a peak of 12.70% in the fall of 2016, for a decline of 1.34% over the seven-year sample (see table 5 and figure 5). Band participation in tenth grade dropped by 1.12% from 11.61% in the fall of 2019 (pre-pandemic) to 10.49% in the fall of 2021. This data shows a decrease in tenth-grade band enrollment following the onset of the COVID-19 pandemic. Table 5 shows the population and percentage of tenth-grade students from the total school population enrolled in band from 2015–2021.

Table 5. Minnesota 10th grade band enrollment as a percentage of school enrollment by year¹⁹³

Year	2015	2016	2017	2018	2019	2020	2021
10th Grade Band Enrollment	3274	3532	3548	3223	3305	3296	2982
10th Grade Total Enrollment	27676	27806	27999	28051	28479	29627	28438
Band Percentage of 10th Grade							
Total Population	11.83%	12.70%	12.67%	11.49%	11.61%	11.12%	10.49%

¹⁹³ Table created by Matthew G. Marsolek.

Figure 5 shows the trend line for Minnesota school tenth-grade band enrollment from 2015–2021. Note the decrease in enrollment from 2019 (before the COVID-19 pandemic) to 2020 and 2021.

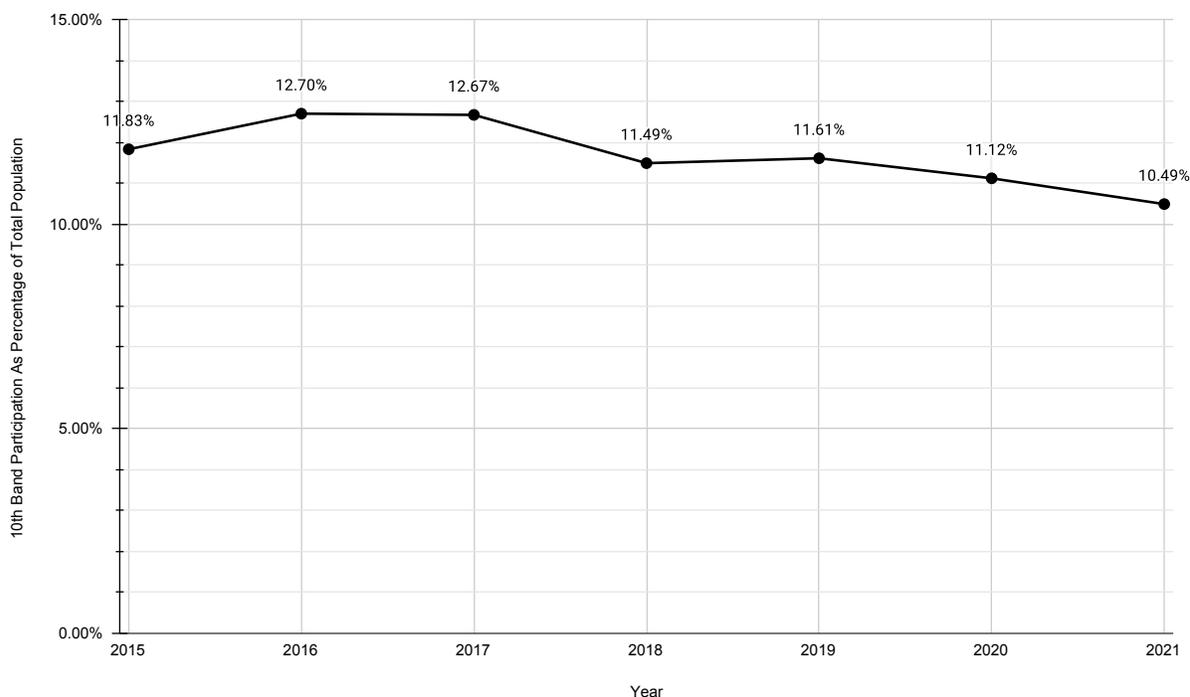


Figure 5. Minnesota 10th grade band enrollment as a percentage of school enrollment by year.¹⁹⁴

Data subsets from metro and non-metro tenth-grade classes from the falls of 2015–2021 were also analyzed. The data included each year’s tenth-grade class total population and each year’s band enrollment numbers for both subsets. The percentage of population that participated in band was calculated from this data. Non-metro tenth-grade band participation dropped from 15.85% in the fall of 2015 to 13.79% in the fall of 2021, with a peak of 16.36% in the fall of

¹⁹⁴ Figure created by Matthew G. Marsolek.

2016, for a decline of 2.06% over the seven-year sample (see table 6 and figure 6). Band participation in non-metro tenth-grade classes dropped by 1.63% from 15.42% in the fall of 2019 (pre-pandemic) to 13.79% in the fall of 2021. Metro tenth-grade band participation dropped from 8.27% in the fall of 2015 to 7.48% in the fall of 2021, with a peak of 9.46% in the fall of 2017, for a decline of 0.79% over the seven-year sample (see table 6 and figure 6). Band participation in metro tenth-grade classes dropped by 0.8% from 8.28% in the fall of 2019 (pre-pandemic) to 7.48% in the fall of 2021. This data shows a decrease in tenth-grade band enrollment following the onset of the COVID-19 pandemic. Table 6 shows the percentage of tenth-grade students from the total school population enrolled in band from 2015–2021 for both metro and non-metro schools.

Table 6. Minnesota 10th grade metro and non-metro high school band enrollment as a percentage of school enrollment by year¹⁹⁵

Year	2015	2016	2017	2018	2019	2020	2021
Band Percentage of 10th Grade							
Non-Metro Population	15.85%	16.36%	16.19%	15.00%	15.42%	15.09%	13.79%
Band Percentage of 10th Grade							
Metro Population	8.27%	9.43%	9.46%	8.42%	8.28%	7.70%	7.48%

¹⁹⁵ Table created by Matthew G. Marsolek.

Figure 6 shows the trend lines for metro and non-metro Minnesota tenth-grade band enrollment from 2015–2021. Note the decrease in enrollment from 2019 (before the COVID-19 pandemic) to 2020 and 2021 for both subgroups. Also, note the difference in band enrollment between the metro and non-metro schools.

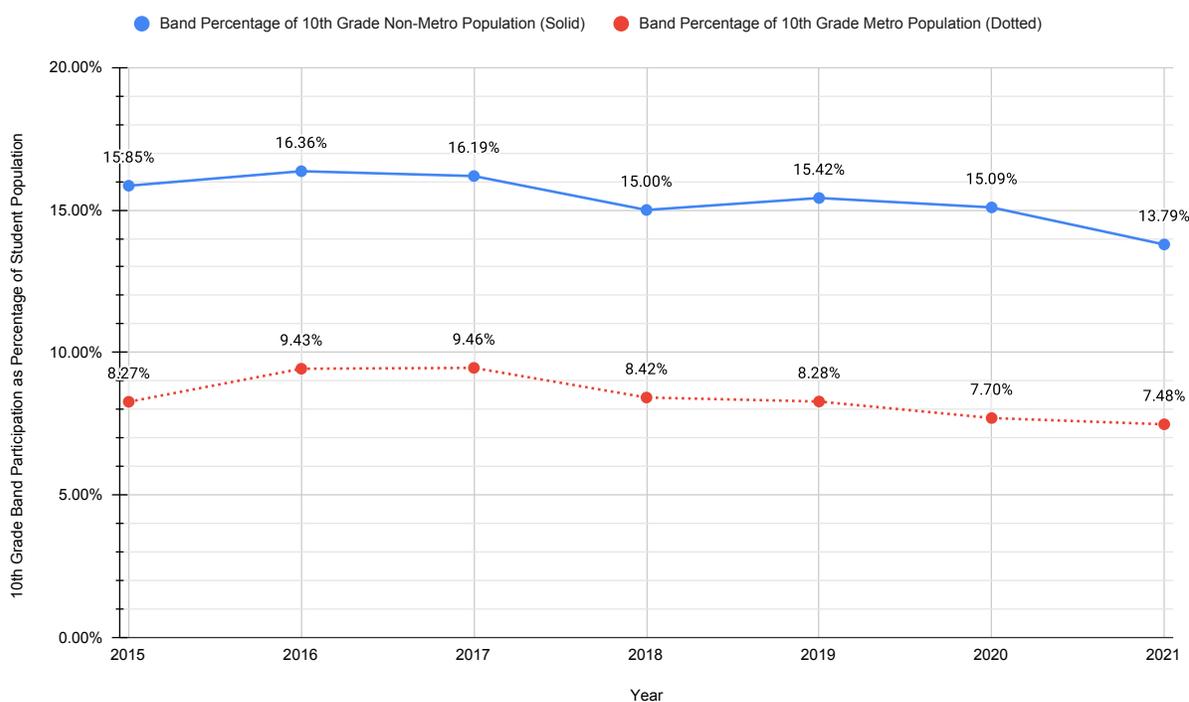


Figure 6. Minnesota 10th grade metro and non-metro high school band enrollment as a percentage of school enrollment by year.¹⁹⁶

11th Grade

Data from Minnesota eleventh-grade classes from the fall of 2015–2021 was obtained and analyzed. The data included each year’s eleventh-grade class total population and each year’s band enrollment numbers. The percentage of population that participated in band was

¹⁹⁶ Figure created by Matthew G. Marsolek.

calculated from this data. Overall, eleventh-grade band participation dropped from 9.21% in the fall of 2015 to 8.48% in the fall of 2021, with a peak of 10.14% in the fall of 2017, for a decline of 0.73% over the seven-year sample (see table 7 and figure 7). Band participation in eleventh grade dropped by 0.81% from 9.29% in the fall of 2019 (pre-pandemic) to 8.48% in the fall of 2021. This data shows a decrease in eleventh-grade band enrollment following the onset of the COVID-19 pandemic. Table 7 shows the population and percentage of eleventh-grade students from the total school population enrolled in band from 2015–2021.

Table 7. Minnesota 11th grade band enrollment as a percentage of school enrollment by year¹⁹⁷

Year	2015	2016	2017	2018	2019	2020	2021
11th Grade Band Enrollment	2397	2501	2660	2543	2460	2496	2322
11th Grade Total Enrollment	26025	26392	26226	27086	26491	26940	27394
Band Percentage of 11th Grade Population	9.21%	9.48%	10.14%	9.39%	9.29%	9.27%	8.48%

¹⁹⁷ Table created by Matthew G. Marsolek.

Figure 7 shows the trend line for Minnesota eleventh-grade band enrollment from 2015–2021.

Note the decrease in enrollment from 2019 (before the COVID-19 pandemic) to 2020 and 2021.

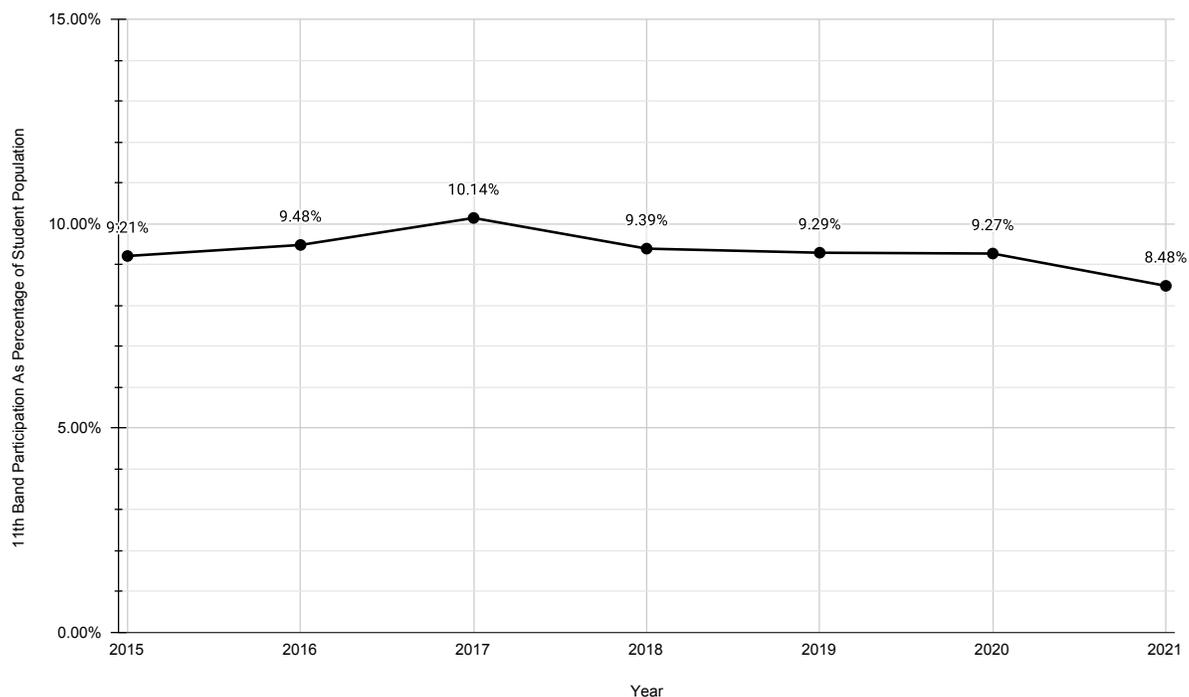


Figure 7. Minnesota 11th grade band enrollment as a percentage of school enrollment by year.¹⁹⁸

Data subsets from metro and non-metro eleventh-grade classes from the falls of 2015–2021 were also analyzed. The data included each year’s eleventh-grade class total population and each year’s band enrollment numbers for both subsets. The percentage of population that participated in band was calculated from this data. Non-metro eleventh-grade band participation dropped from 11.97% in the fall of 2015 to 11.94% in the fall of 2021, with a peak of 13.73% in the fall of 2017, for a decline of 0.03% over the seven-year sample (see table 8 and figure 8).

¹⁹⁸ Figure created by Matthew G. Marsolek.

Band participation in non-metro eleventh-grade classes dropped by 0.62% from 12.56% in the fall of 2019 (pre-pandemic) to 11.94% in the fall of 2021. Metro eleventh-grade band participation dropped from 6.74% in the fall of 2015 to 5.45% in the fall of 2021, with a peak of 6.86% in the fall of 2017, for a decline of 1.29% over the seven-year sample (see table 8 and figure 8). Band participation in metro eleventh-grade classes dropped by 0.95% from 6.40% in the fall of 2019 (pre-pandemic) to 5.45% in the fall of 2021. This data shows a decrease in eleventh-grade band enrollment following the onset of the COVID-19 pandemic. Table 8 shows the percentage of eleventh-grade students from the total school population enrolled in band from 2015–2021 for both metro and non-metro schools.

Table 8. Minnesota 11th grade metro and non-metro high school band enrollment as a percentage of school enrollment by year¹⁹⁹

Year	2015	2016	2017	2018	2019	2020	2021
Band Percentage of 11th Grade Non-Metro Population	11.97%	13.44%	13.73%	12.90%	12.56%	12.70%	11.94%
Band Percentage of 11th Grade Metro Population	6.74%	5.93%	6.86%	6.31%	6.40%	6.27%	5.45%

¹⁹⁹ Table created by Matthew G. Marsolek.

Figure 8 shows the trend lines for metro and non-metro Minnesota eleventh-grade band enrollment from 2015–2021. Note the decrease in enrollment from 2019 (before the COVID-19 pandemic) to 2020 and 2021 for both subgroups. Also, note the difference in band enrollment between the metro and non-metro schools.

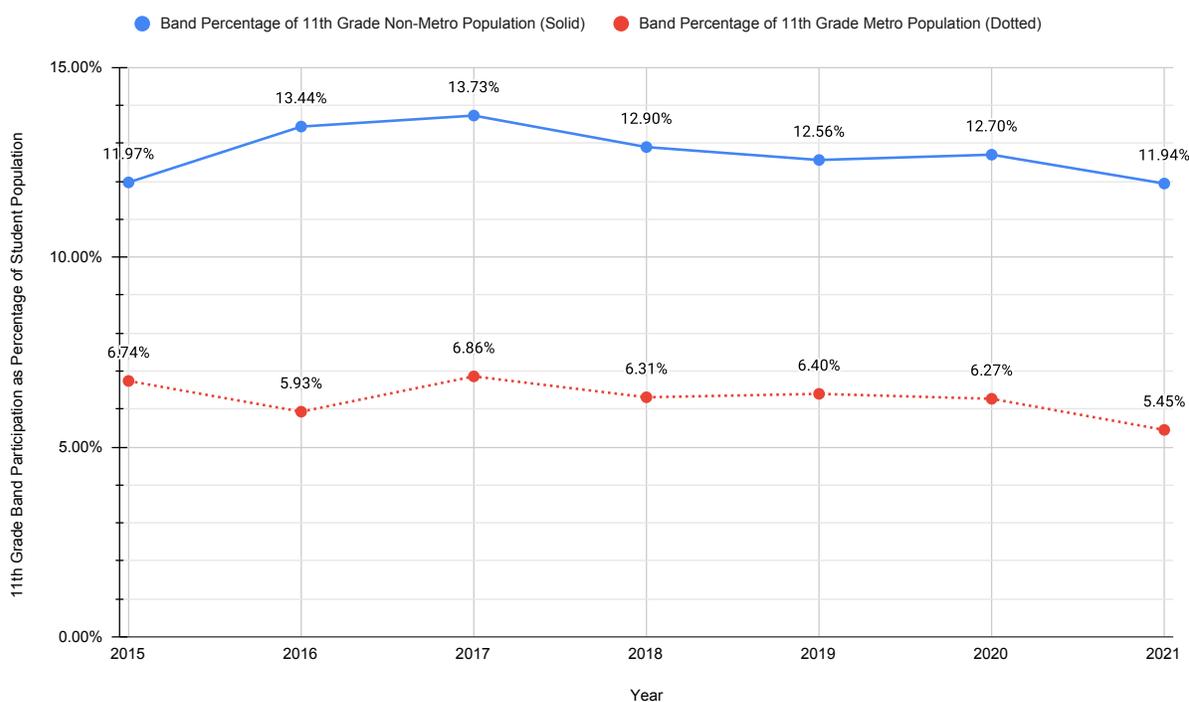


Figure 8. Minnesota 11th grade metro and non-metro high school band enrollment as a percentage of school enrollment by year.²⁰⁰

12th Grade

Data from Minnesota twelfth-grade classes from the fall of 2015–2021 was obtained and analyzed. The data included each year’s twelfth-grade class total population and each year’s band enrollment numbers. The percentage of population that participated in band was calculated

²⁰⁰ Figure created by Matthew G. Marsolek.

from this data. Twelfth-grade band participation dropped from 8.44% in the fall of 2015 to 7.41% in the fall of 2021, with a peak of 8.66% in the fall of 2018, for a decline of 1.03% over the seven-year sample (see Table 9 and Figure 9). Band participation in twelfth grade dropped by 1.17% from 8.58% in the fall of 2019 (pre-pandemic) to 7.41% in the fall of 2021. This data shows a decrease in twelfth-grade band enrollment following the onset of the COVID-19 pandemic. Table 9 shows the population and percentage of twelfth-grade students from the total school population enrolled in band from 2015–2021.

Table 9. Minnesota 12th grade band enrollment as a percentage of school enrollment by year²⁰¹

Year	2015	2016	2017	2018	2019	2020	2021
12th Grade Band Enrollment	2076	2028	2043	2122	2139	2033	1831
12th Grade Total Enrollment	24591	24198	24186	24506	24943	24713	24717
Band Percentage of 12th Grade Population	8.44%	8.38%	8.45%	8.66%	8.58%	8.23%	7.41%

²⁰¹ Table created by Matthew G. Marsolek.

Figure 9 shows the trend line for Minnesota twelfth-grade band enrollment from 2015–2021.

Note the decrease in enrollment from 2019 (before the COVID-19 pandemic) to 2020 and 2021.

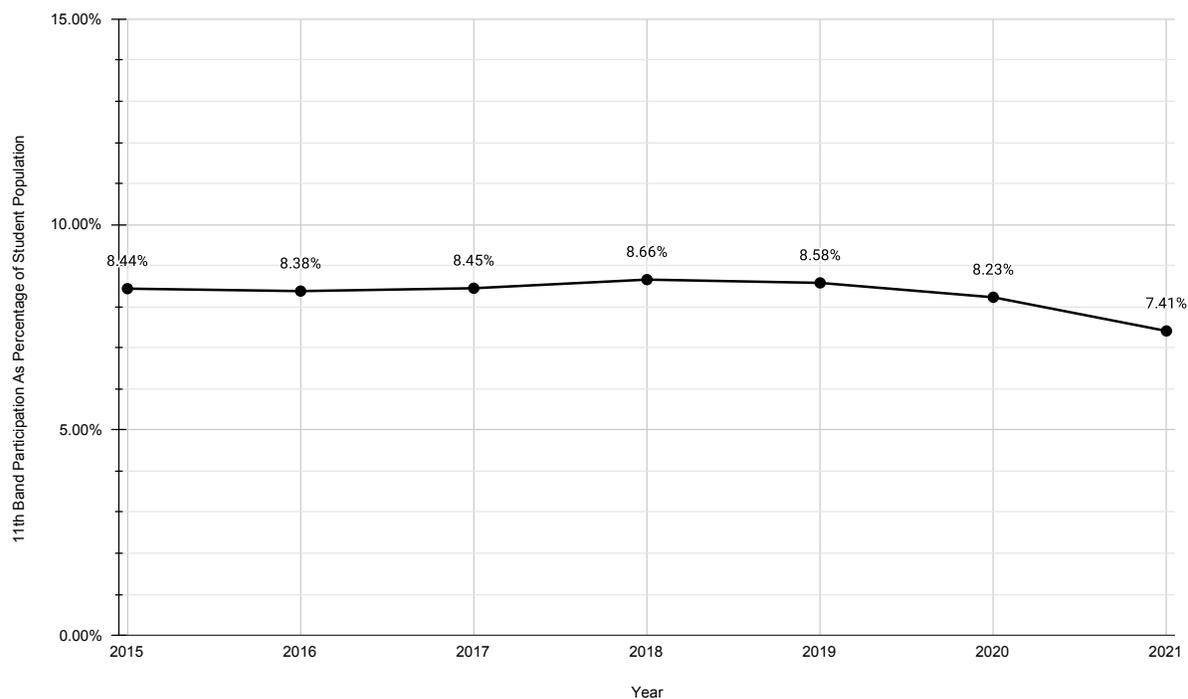


Figure 9. Minnesota 12th grade band enrollment as a percentage of school enrollment by year.²⁰²

Data subsets from metro and non-metro twelfth-grade classes, measured in the fall from 2015–2021, were also analyzed. The data included each year’s twelfth-grade class total population and each year’s band enrollment numbers for both subsets. The percentage of population that participated in band was calculated from this data. Non-metro twelfth-grade band participation dropped from 11.91% in the fall of 2015 to 10.45% in the fall of 2021, with a peak of 12.52% in the fall of 2018, for a decline of 1.46% over the seven-year sample (see table 10

²⁰² Figure created by Matthew G. Marsolek.

and figure 10). Band participation in non-metro twelfth-grade classes dropped by 1.60% from 12.05% in the fall of 2019 (pre-pandemic) to 10.45% in the fall of 2021. Metro twelfth-grade band participation dropped from 5.28% in the fall of 2015 to 4.68% in the fall of 2021, with a peak of 5.72% in the fall of 2016, for a decline of 0.60% over the seven-year sample (see table 10 and figure 10). Band participation in metro twelfth-grade classes dropped by 0.88% from 5.56% in the fall of 2019 (pre-pandemic) to 4.68% in the fall of 2021. This data shows a decrease in metro and non-metro twelfth-grade band enrollment following the onset of the COVID-19 pandemic. Table 10 shows the percentage of twelfth-grade students from the total school population enrolled in band from 2015–2021 for both metro and non-metro schools.

Table 10. Minnesota 12th grade metro and non-metro high school band enrollment as a percentage of school enrollment by year²⁰³

Year	2015	2016	2017	2018	2019	2020	2021
Band Percentage of 12th Grade							
Non-Metro Population	11.91%	11.36%	12.29%	12.52%	12.05%	11.48%	10.45%
Band Percentage of 12th Grade							
Metro Population	5.28%	5.72%	4.90%	5.28%	5.56%	5.34%	4.68%

²⁰³ Table created by Matthew G. Marsolek.

Figure 10 shows the trend lines for metro and non-metro Minnesota twelfth-grade band enrollment from 2015–2021. Note the decrease in enrollment from 2019 (before the COVID-19 pandemic) to 2020 and 2021 for both subgroups. Also, note the difference in band enrollment between the metro and non-metro schools.

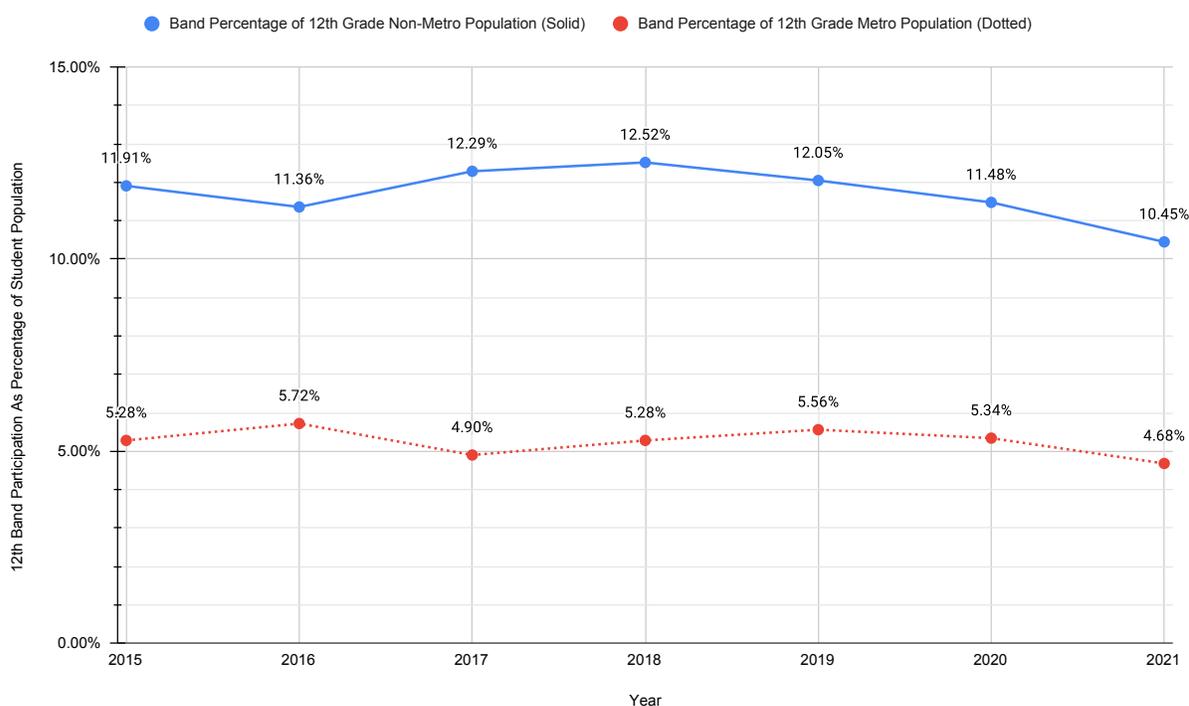


Figure 10. Minnesota 12th grade metro and non-metro high school band enrollment as a percentage of school enrollment by year.²⁰⁴

Trends Based on Graduation Class Cohorts

With population and band enrollment numbers available from 2015 to 2021, graduation year cohorts were also analyzed for trends. These cohorts follow the same group of students from

²⁰⁴ Figure created by Matthew G. Marsolek.

their ninth-grade year to their twelfth-grade year. With the span of data, the cohorts with complete sets of data from grade 9–12 is that of the classes of 2019, 2020, 2021, and 2022.

The Class of 2019

Data from the Minnesota graduating class of 2019 was obtained and analyzed. Data was included from the fall of each year of the cohorts' total population and each year's band enrollment numbers. The percentage of population that participated in band was calculated from this data. The class of 2019 entered ninth grade in the fall of 2015, and their senior year data was taken in the fall of 2018. Overall, class of 2019 band participation dropped from 15.67% in the fall of 2015 to 8.66% in the fall of 2018, with a decline of 7.01% over the four-year sample (see table 11 and figure 11). This includes a decrease in band participation for the class of 2019 each year, including a 2.97% decrease between ninth and tenth grade, a 2.56% decrease between tenth and eleventh grade, and a 1.48% decrease from eleventh to twelfth grade. This data from the class of 2019 shows an annual decrease in band enrollment. Table 11 shows the class of 2019's population and percentage of students from the total school population who were enrolled in band from 2015–2018.

Table 11. Minnesota class of 2019 band enrollment as a percentage of school enrollment by year²⁰⁵

Year	2015	2016	2017	2018
Class of 2019 Band Enrollment	4421	3532	2660	2122
Class of 2019 Total Enrollment	28211	27806	26226	24506
Class of 2019 Band Percentage of Population	15.67%	12.70%	10.14%	8.66%

²⁰⁵ Table created by Matthew G. Marsolek.

Figure 1 shows the trend line for the Minnesota class of 2019's band enrollment from the fall of 2015–2018.

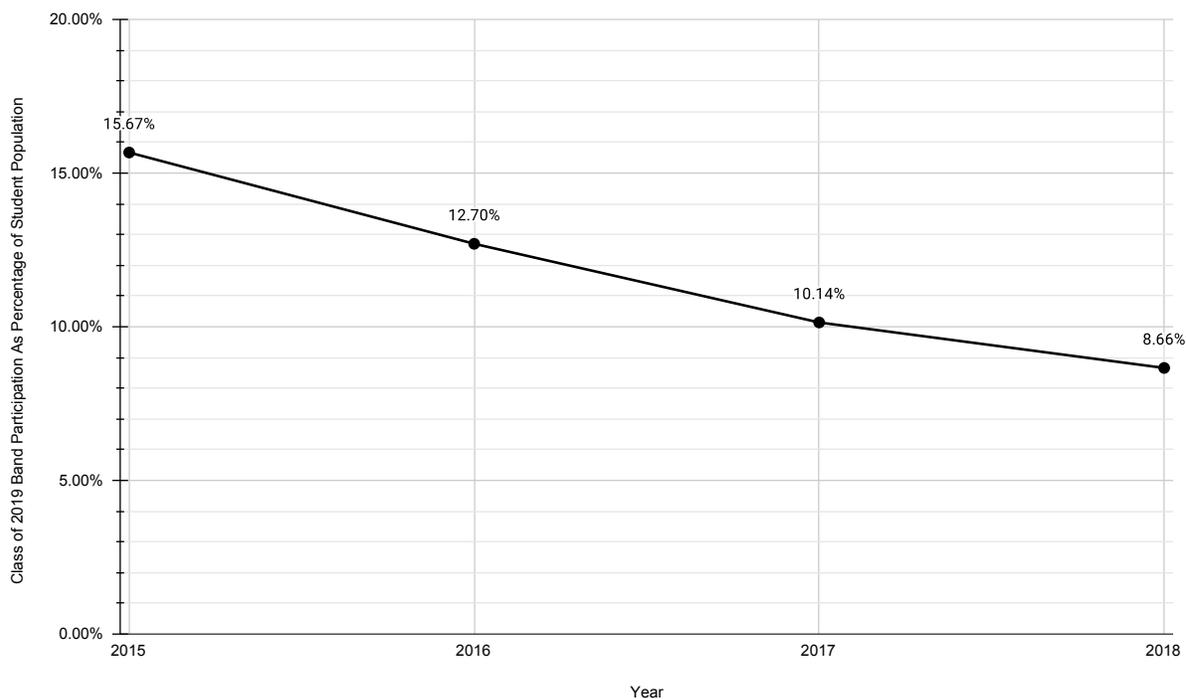


Figure 11. Minnesota class of 2019 band enrollment as a percentage of school enrollment by year.²⁰⁶

Data subsets from metro and non-metro classes of the 2019 cohort were also analyzed. The data included each year's class total population and each year's band enrollment numbers for both subsets. The percentage of population that participated in band was calculated from this data. Non-metro class of 2019 band participation dropped from 18.35% in the fall of 2015 to 12.53% in the fall of 2018, with a decline of 5.82% over the four-year sample (see table 12 and figure 12). This includes a decrease in band participation for non-metro the class of 2019 each

²⁰⁶ Figure created by Matthew G. Marsolek.

year, including a 1.99% decrease between ninth and tenth grade, a 2.63% decrease between tenth and eleventh grade, and a 1.20% decrease from eleventh to twelfth grade. Metro class of 2019 band participation dropped from 13.24% in the fall of 2015 to 5.28% in the fall of 2018, with a decline of 7.96% over the four-year sample (see table 12 and figure 12). This includes a decrease in band participation for the metro class of 2019 each year, including a 3.81% decrease between ninth and tenth grade, a 2.57% decrease between tenth and eleventh grade, and a 1.58% decrease from eleventh to twelfth grade. This data from the class of 2019 shows an annual decrease in band enrollment for both metro and non-metro subgroups. Table 12 shows the class of 2019's percentage from the total school population enrolled in band from 2015—2018 for both metro and non-metro schools.

Table 12. Minnesota class of 2019 metro and non-metro high school band enrollment as a percentage of school enrollment by year²⁰⁷

Year	2015	2016	2017	2018
Class of 2019 Band Percentage of Non-Metro Population	18.35%	16.36%	13.73%	12.53%
Class of 2019 Band Percentage of Metro Population	13.24%	9.43%	6.86%	5.28%

Figure 12 shows the trend lines for the metro and non-metro Minnesota class of 2019 band enrollment from 2015—2018. Note the difference in band enrollment between the metro and non-metro schools.

²⁰⁷ Table created by Matthew G. Marsolek.

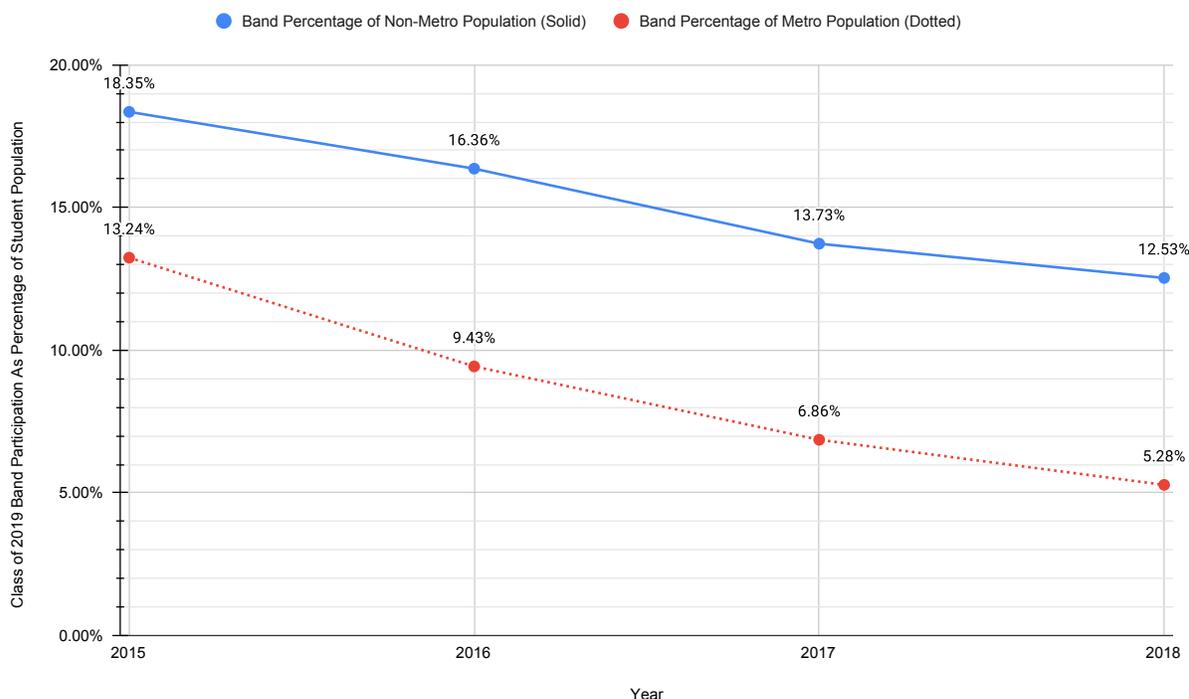


Figure 12. Minnesota class of 2019 metro and non-metro high school band enrollment as a percentage of school enrollment by year.²⁰⁸

The Class of 2020

Data from the Minnesota graduating class of 2020 was obtained and analyzed. Data were included from the fall of each year of the cohorts' total population and each year's band enrollment numbers. The percentage of population that participated in band was calculated from this data. The class of 2020 entered ninth grade in the fall of 2016, and their senior-year data was taken in the fall of 2019. Overall, class of 2020 band participation dropped from 15.66% in the fall of 2016 to 8.58% in the fall of 2019, with a decline of 7.08% over the four-year sample (see table 13 and figure 13). This includes a decrease in band participation for the class of 2020 each year, including a 2.99% decrease between ninth and tenth grade, a 3.28% decrease between tenth

²⁰⁸ Figure created by Matthew G. Marsolek.

and eleventh grade, and a 0.81% decrease from eleventh to twelfth grade. This data from the class of 2020 shows an annual decrease in band enrollment. Table 13 shows the class of 2020's population and the percentage of students from the total school population enrolled in band from 2015–2018.

Table 13. Minnesota class of 2020 band enrollment as a percentage of school enrollment by year²⁰⁹

Year (Fall)	2016	2017	2018	2019
Class of 2020 Band Enrollment	4502	3548	2543	2139
Class of 2020 Total Enrollment	28754	27999	27086	24943
Class of 2020 Band Percentage of Population	15.66%	12.67%	9.39%	8.58%

Figure 13 shows the trend line for the Minnesota class of 2020's band enrollment from the fall of 2015–2018.

²⁰⁹ Table created by Matthew G. Marsolek.

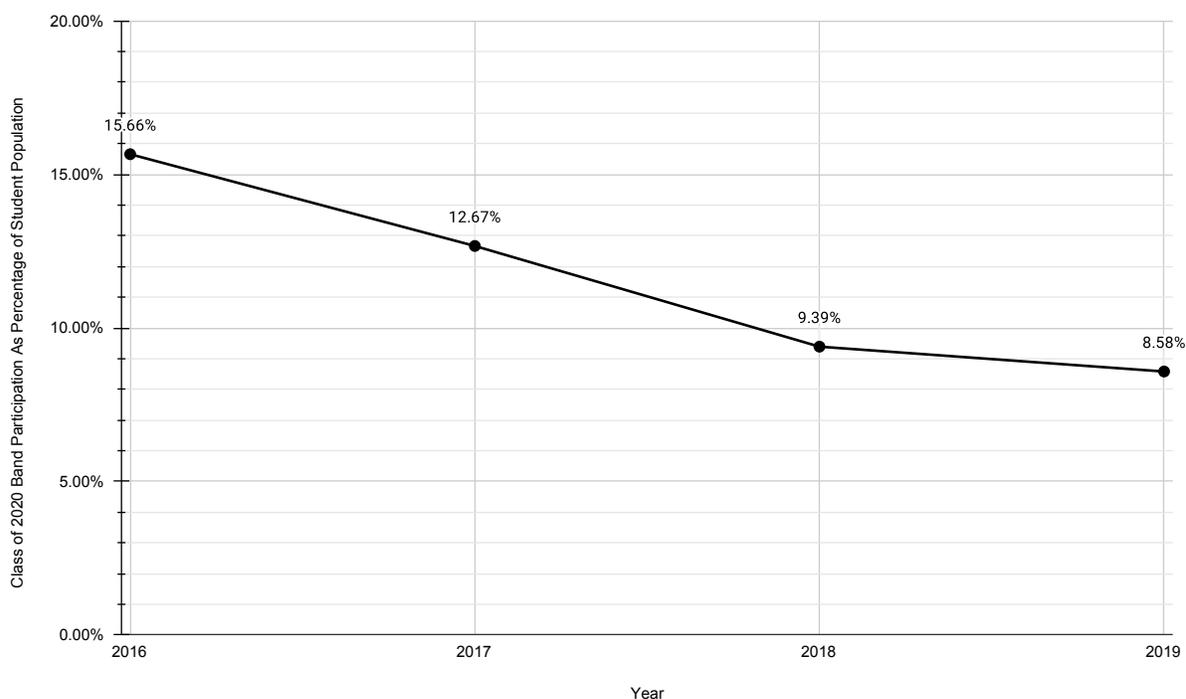


Figure 13. Minnesota class of 2020 band enrollment as a percentage of school enrollment by year.²¹⁰

Data subsets from the metro and non-metro classes of the 2020 cohort were also analyzed. The data included each year's class total population and each year's band enrollment numbers for both subsets. The percentage of population that participated in band was calculated from this data. Non-metro class of 2020 band participation dropped from 18.43% in the fall of 2016 to 12.05% in the fall of 2019, with a decline of 6.38% over the four-year sample (see table 14 and figure 14). This includes a decrease in band participation for the non-metro class of 2020 each year, including a 2.24% decrease between ninth and tenth grade, a 3.29% decrease between tenth and eleventh grade, and a 0.85% decrease from eleventh to twelfth grade. Metro class of 2020 band participation dropped from 13.18% in the fall of 2016 to 5.56% in the fall of 2019,

²¹⁰ Figure created by Matthew G. Marsolek.

with a decline of 7.62% over the four-year sample (see table 14 and figure 14). This includes a decrease in band participation for the metro class of 2020 each year, including a 3.72% decrease between ninth and tenth grade, a 3.15% decrease between tenth and eleventh grade, and a 0.75% decrease from eleventh to twelfth grade. This data from the class of 2020 shows an annual decrease in band enrollment for both metro and non-metro subgroups. Table 14 shows the class of 2020's percentage from the total school population enrolled in band from 2016–2019 for both metro and non-metro schools.

Table 14. Minnesota class of 2020 metro and non-metro high school band enrollment as a percentage of school enrollment by year²¹¹

Year (Fall)	2016	2017	2018	2019
Class of 2020 Band Percentage of Non-Metro Population	18.43%	16.19%	12.90%	12.05%
Class of Band Percentage of Metro Population	13.18%	9.46%	6.31%	5.56%

Figure 14 shows the trend lines for the metro and non-metro Minnesota class of 2020 band enrollment from 2016–2019. Note the difference in band enrollment between the metro and non-metro schools.

²¹¹ Table created by Matthew G. Marsolek.

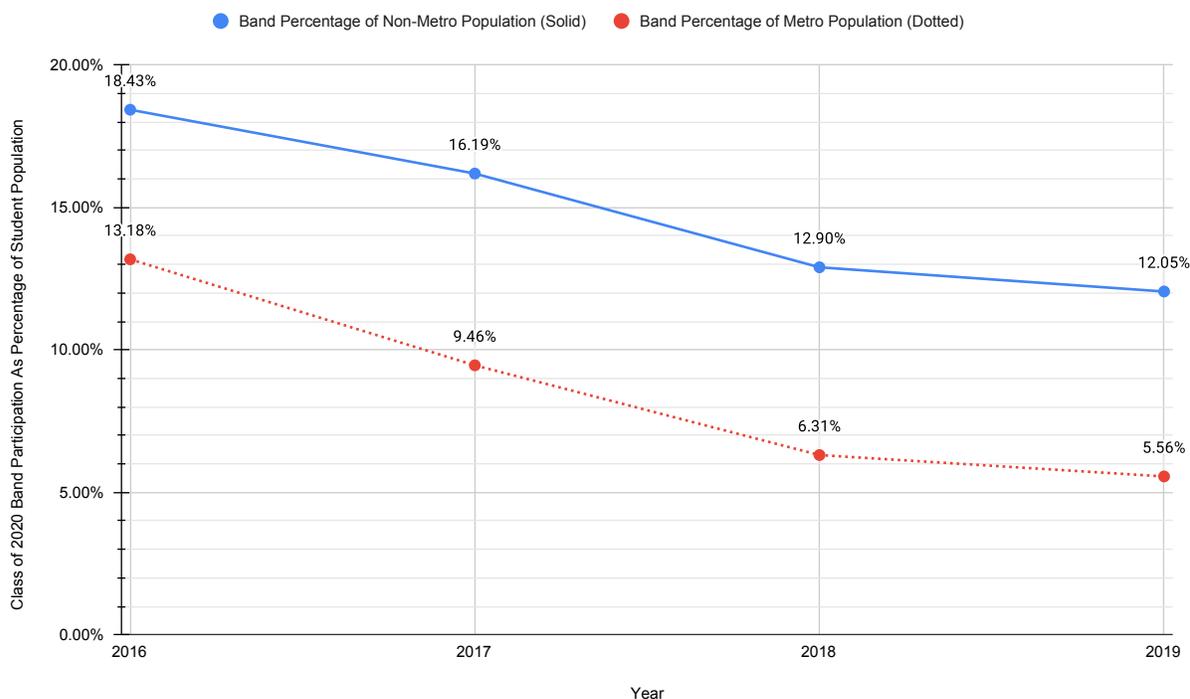


Figure 14. Minnesota class of 2020 metro and non-metro high school band enrollment as a percentage of school enrollment by year.²¹²

The Class of 2021

Data from the Minnesota graduating class of 2021 was obtained and analyzed. Data was included from the fall of each year of the cohorts' total population and each year's band enrollment numbers. The percentage of population that participated in band was calculated from this data. The class of 2021 entered ninth grade in the fall of 2017, and their senior-year data was taken in the fall of 2020. Overall, class of 2021 band participation dropped from 16.05% in the fall of 2017 to 8.23% in the fall of 2020, with a decline of 7.82% over the four-year sample (see table 15 and figure 15). This includes a decrease in band participation for the class of 2021 each year, including a 4.56% decrease between ninth and tenth grade, a 2.20% decrease between tenth

²¹² Figure created by Matthew G. Marsolek.

and eleventh grade, and a 1.06% decrease from eleventh to twelfth grade. This data from the class of 2021 shows an annual decrease in band enrollment. Table 15 shows the class of 2021's population and the percentage of students from the total school population enrolled in band from 2017–2020.

Table 15. Minnesota class of 2021 band enrollment as a percentage of school enrollment by year²¹³

Year (Fall)	2017	2018	2019	2020
Class of 2021 Band Enrollment	4484	3223	2460	2033
Class of 2021 Total Enrollment	27937	28051	26491	24713
Class of 2021 Band Percentage of Population	16.05%	11.49%	9.29%	8.23%

²¹³ Table created by Matthew G. Marsolek.

Figure 15 shows the trend line for the Minnesota class of 2021's band enrollment from the fall of 2017–2020.

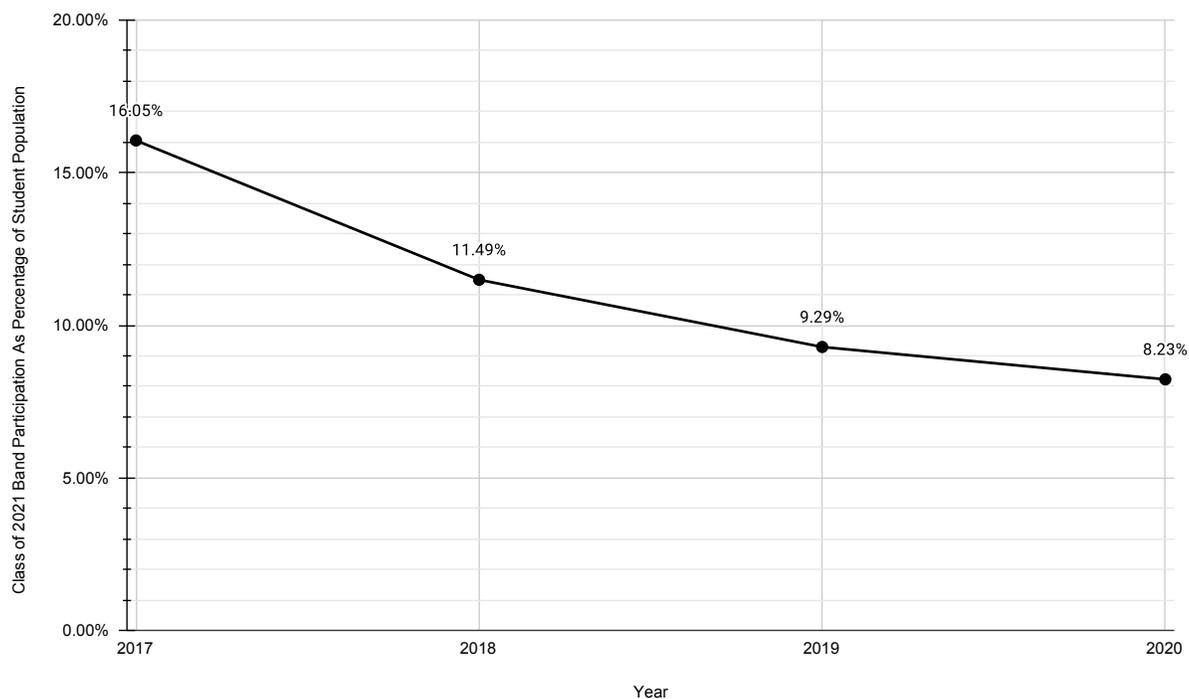


Figure 15. Minnesota class of 2021 band enrollment as a percentage of school enrollment by year.²¹⁴

Data subsets from the metro and non-metro class of 2021 cohort were also analyzed. The data included each year's class total population and each year's band enrollment numbers for both subsets. The percentage of population that participated in band was calculated from this data. Non-metro class of 2021 band participation dropped from 18.76% in the fall of 2017 to 11.48% in the fall of 2020, with a decline of 7.28% over the four-year sample (see table 16 and figure 16). This includes a decrease in band participation for the non-metro class of 2021 each

²¹⁴ Figure created by Matthew G. Marsolek.

year, including a 3.76% decrease between ninth and tenth grade, a 2.44% decrease between tenth and eleventh grade, and a 1.08% decrease from eleventh to twelfth grade. Metro class of 2021 band participation dropped from 13.54% in the fall of 2017 to 5.34% in the fall of 2020, with a decline of 8.20% over the four-year sample (see table 16 and figure 16). This includes a decrease in band participation for the metro class of 2021 each year, including a 5.12% decrease between ninth and tenth grade, a 2.02% decrease between tenth and eleventh grade, and a 1.06% decrease from eleventh to twelfth grade. This data from the class of 2021 shows an annual decrease in band enrollment for both metro and non-metro subgroups. Table 16 shows the class of 2021's percentage from the total school population enrolled in band from 2017–2020 for both metro and non-metro schools.

Table 16. Minnesota class of 2021 metro and non-metro high school band enrollment as a percentage of school enrollment by year²¹⁵

Year (Fall)	2017	2018	2019	2020
Class of 2021 Band Percentage of Non-Metro Population	18.76%	15.00%	12.56%	11.48%
Class of 2021 Band Percentage of Metro Population	13.54%	8.42%	6.40%	5.34%

Figure 16 shows the trend lines for the metro and non-metro Minnesota class of 2021 band enrollment from 2017–2020. Note the difference in band enrollment between the metro and non-metro schools.

²¹⁵ Table created by Matthew G. Marsolek.

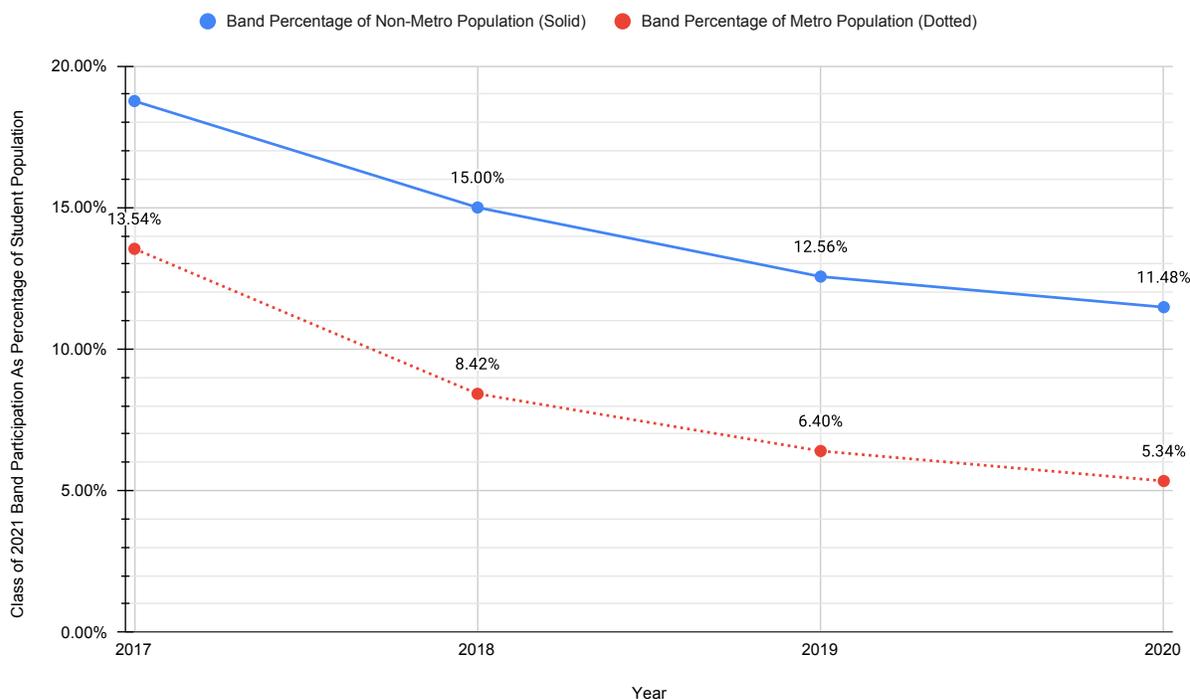


Figure 16. Minnesota class of 2021 metro and non-metro high school band enrollment as a percentage of school enrollment by year.²¹⁶

The Class of 2022

Data from the Minnesota graduating class of 2022 was obtained and analyzed. Data was included from the fall of each year of the cohorts' total population and each year's band enrollment numbers. The percentage of population that participated in band was calculated from this data. The class of 2022 entered ninth grade in the fall of 2018, and their senior-year data was taken in the fall of 2021. Overall, class of 2022 band participation dropped from 14.48% in the fall of 2018 to 7.41% in the fall of 2021, with a decline of 7.07% over the four-year sample (see table 17 and figure 17). This includes a decrease in band participation for the class of 2022 each year, including a 2.87% decrease between ninth and tenth grade, a 2.34% decrease between tenth

²¹⁶ Figure created by Matthew G. Marsolek.

and eleventh grade, and a 1.86% decrease from eleventh to twelfth grade. This data from the class of 2022 shows an annual decrease in band enrollment. Table 17 shows the class of 2022's population and percentage of students from the total school population enrolled in band from 2018–2021.

Table 17. Minnesota class of 2022 band enrollment as a percentage of school enrollment by year²¹⁷

Year (Fall)	2018	2019	2020	2021
Class of 2022 Band Enrollment	4211	3305	2496	1831
Class of 2022 Total Enrollment	29075	28479	26940	24717
Class of 2022 Band Percentage of Population	14.48%	11.61%	9.27%	7.41%

²¹⁷ Table created by Matthew G. Marsolek.

Figure 17 shows the trend line for the Minnesota class of 2022's band enrollment from the fall of 2018–2021.

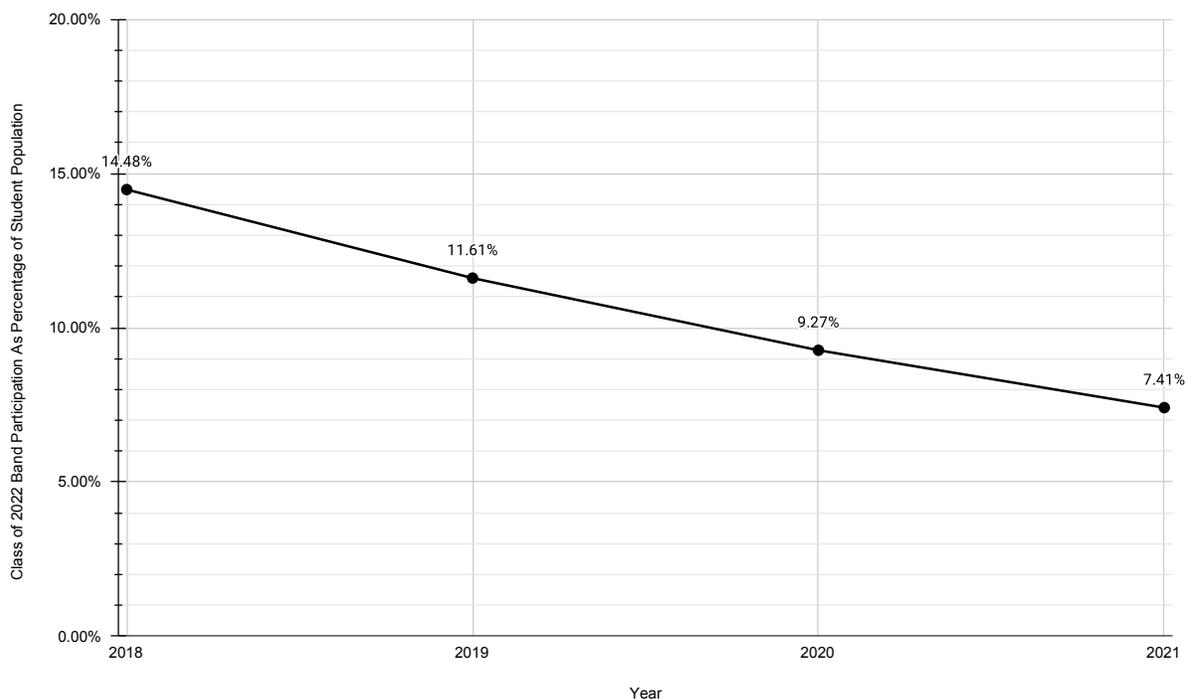


Figure 17. Minnesota class of 2022 band enrollment as a percentage of school enrollment by year.²¹⁸

Data subsets from the metro and non-metro class of 2022 cohort were also analyzed. The data included each year's class total population and each year's band enrollment numbers for both subsets. The percentage of population that participated in band was calculated from this data. Non-metro class of 2022 band participation dropped from 17.77% in the fall of 2018 to 10.45% in the fall of 2021, with a decline of 7.32% over the four-year sample (see table 18 and figure 18). This includes a decrease in band participation for the non-metro class of 2022 each

²¹⁸ Figure created by Matthew G. Marsolek.

year, including a 2.35% decrease between ninth and tenth grade, a 2.72% decrease between tenth and eleventh grade, and a 2.25% decrease from eleventh to twelfth grade. Metro class of 2022 band participation dropped from 11.56% in the fall of 2018 to 4.68% in the fall of 2021, with a decline of 6.88% over the four-year sample (see table 18 and figure 18). This includes a decrease in band participation for the metro class of 2022 each year, including a 3.28% decrease between ninth and tenth grade, a 2.01% decrease between tenth and eleventh grade, and a 1.59% decrease from eleventh to twelfth grade. This data from the class of 2022 shows an annual decrease in band enrollment for both metro and non-metro subgroups. Table 18 shows the class of 2022's percentage from the total school population enrolled in band from 2018–2021 for both metro and non-metro schools.

Table 18. Minnesota class of 2022 metro and non-metro high school band enrollment as a percentage of school enrollment by year²¹⁹

Year	2018	2019	2020	2021
Class of 2022 Band Percentage of Non-Metro Population	17.77%	15.42%	12.70%	10.45%
Class of 2022 Band Percentage of Metro Population	11.56%	8.28%	6.27%	4.68%

²¹⁹ Table created by Matthew G. Marsolek.

Figure 18 shows the trend lines for the metro and non-metro Minnesota class of 2022 band enrollment from 2018–2021. Note the difference in band enrollment between the metro and non-metro schools.

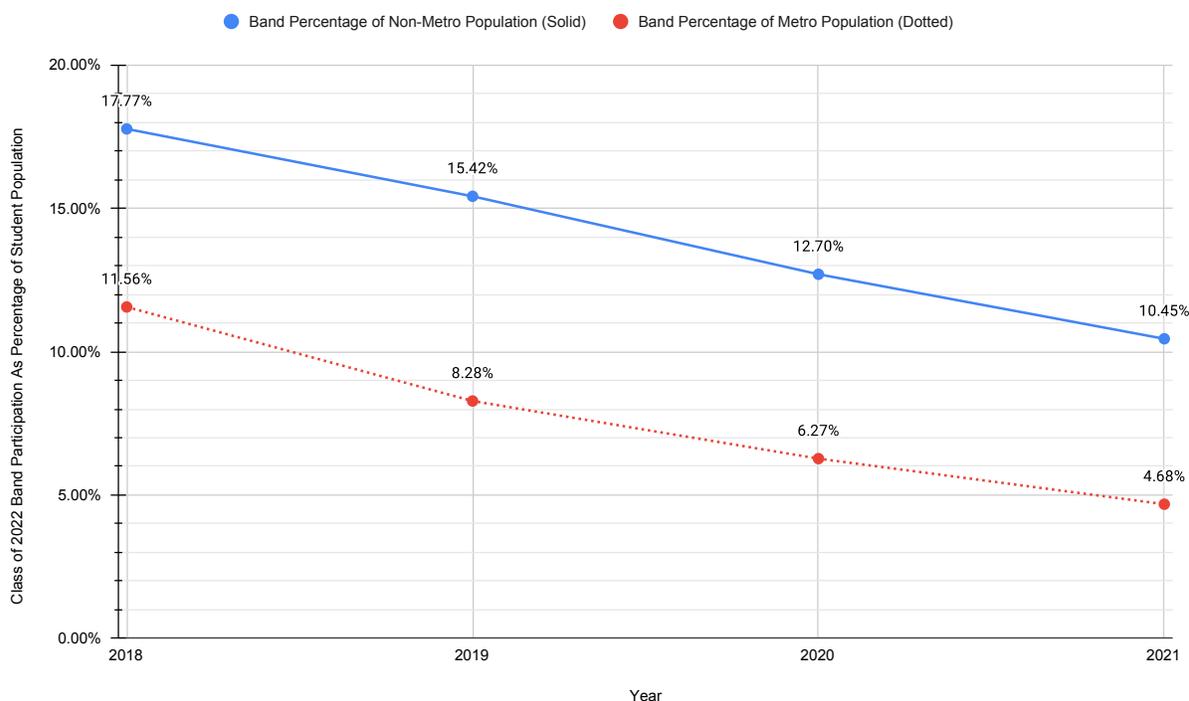


Figure 18. Minnesota class of 2022 metro and non-metro high school band enrollment as a percentage of school enrollment by year.²²⁰

Section II: Minnesota High School Band Director Survey Findings

Seventy-seven eligible Minnesota high school band directors participated in the study and completed the survey. The survey was broken into three sections: Band Program Enrollment, Band Program Offerings, and Band Director FTE. All seventy-seven participants completed the survey in its entirety.

²²⁰ Figure created by Matthew G. Marsolek.

Survey Question 1: Informed Consent

The first question of the director survey was that of informed consent. The first page visible to participants included the approved informed consent outline, which included the invitation to take part in the research study (inclusion criteria), the purpose of the study, information on what would happen when the participant takes the study, possible benefits of the study, possible risks of participation in the study, a statement of data privacy and personal anonymity, a statement on compensation, a statement on the voluntary nature of the study, information on how to withdraw from the study, and contact information for questions about the study and questions about research participant rights, which can be viewed in Appendix B. The page concluded with a statement about the individual's consent to participate in the research study and the first question: "Do you wish to participate in this study?" The two options given were "Yes" and "No." Those who chose "NO" were sent to a page titled "Declined Participation," which instructed the participant to close their browser window. All participants who chose "Yes" after reading the informed consent and inclusion criteria were directed to the first section of the survey ($N = 77$).

Survey Part 1: Band Program Enrollment Findings

The focus of the first section of the survey was to assess band directors' perception of how the COVID-19 pandemic affected enrollment in their band programs. This was done through a five-point Likert-type question. Directors that indicated Significant Decrease, Slight Decrease, or no/impact or noticeable decrease continued through possible factors that affected band program enrollment. Directors indicating a Slight Increase or Significant Increase bypassed questions about factors. Additional, open-ended questions explored characteristics the directors believe affected band program enrollment.

Survey Question 2: Impact of COVID-19 Pandemic on Band Program Enrollment

The second survey question asked if directors believe that the COVID-19 pandemic had an impact on their programs' enrollment between the 2019–2020 school year and the 2020–2021 school year. Most directors (77.9%; $n = 60$) indicated some perceived decrease in enrollment due to the COVID-19 pandemic (see figure 19). Twenty-six respondents (33.8%; $n = 26$) indicated their program had a significant decrease in enrollment, and thirty-four respondents (44.2%; $n = 34$) reported a slight decrease in enrollment. There was no perceived impact or noticeable increase or decrease in thirteen of the directors' programs (16.9%; $n = 13$). The smallest response level was received for program enrollment increases, with three respondents (3.9%; $n = 3$) selecting slight increase and one respondent (1.3%, $n = 1$) indicating a significant increase.

What impact, if any, do you believe the COVID-19 Pandemic had on your band program's enrollment between the 2019-2020 (prepandemic) school year and the 2020-2021 school year?

77 responses

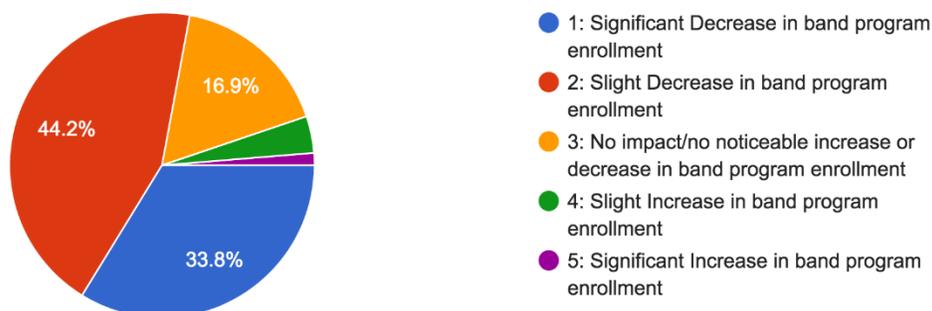


Figure 19. Impact on enrollment in band programs.²²¹

²²¹ Figure created by Matthew Marsolek.

Survey Question 3: Band Enrollment Increase

In survey question two, participants were allowed to indicate that their band program enrollment had increased during the 2019–2020 to 2020–2021 school years. Participants were allowed to qualify for this with a free-response and were not given the option to select factors for program enrollment decrease. Four of the seventy-seven total participants (5.19%; $n = 4$) indicated a perceived increase in program enrollment, with three of the respondents (3.9%; $n = 3$) indicating a slight increase in band program enrollment, and one participant (1.3%; $n = 1$) indicating a significant increase in enrollment.

The main theme that arose in the coding of the data on band enrollment increase was that of relationships, which was identified as a factor by all participants answering this question ($n = 4$). One of the participants qualified their response by writing, “I was new in the 19-20 school year, and the teacher before me had driven a lot of kids out of the program so I think it was my building relationships with the kids that led to enrollment increase and not the pandemic itself.” Another cited the “Ability to move at a slower pace and make meaningful connections with all students.” A third offered, “Developing feeder programs, and the ability of these programs (which are in private parochial schools) to continue to offer mostly in person (with significant and appropriate mitigation techniques) lessons and modified ensembles,” as a reason. The fourth explained,

“We took a lot of time focusing on the students. Keeping them engaged in a multitude of activities and connecting with them one-on-one as much as possible. However, even though our enrollment slightly increased, we are suffering from some instrumentation issues that we overlooked during the pandemic. Also, because we decided to lower some of the academic and technical expectations for students, we did struggle with some

literature that would not have been a problem before the pandemic. In the end, we find it a fair trade-off and we are finding ways to compensate in the upcoming years.”

Survey Questions 4 and 5: Factors Affecting Change in Enrollment

The next set of questions allowed the respondents to qualify their responses to the first question. Participants who indicated that there was a significant or slight decrease in band program enrollment or that there was no impact, were then able to indicate how much they believe specific pandemic-related factors had an impact on enrollment, which accounted for seventy-three (94.8%; $n = 73$) of the seventy-seven participants. The remaining four participants (5.2%; $n = 4$) who selected slight or significant increase in band program enrollment were asked what factors they believe led to the increase in their band programs' enrollment.

Participants indicating a decrease in band program enrollment responded to twenty specific factors that were perceived impact band enrollment and one option for “other” factors. Survey questions four and five were the same. Still, they broke the factors up between these two separate questions to overwhelm participants in the study with too many factors at one time. Factors were rated using a five-point Likert-type scale: Not a factor/not applicable; small or minimal factor in decreased enrollment; moderate factor in decreased enrollment, strong factor in increased enrollment; and very strong factor in decreased enrollment. The factors measured were: parental concerns related to health and safety, social distancing/spacing within the ensemble; use of band-specific PPE; reduced ensemble size due to reduced classroom capacity; required use of flex or non-traditional repertoire to account for changes in ensemble size or instrumentation; decreased level of musicianship within ensembles; relocation of ensemble rehearsals (outdoors, gyms, etc.); additional sanitation procedures; decreased social interaction among ensemble members; online/remote learning; hybrid learning model; decrease in live

rehearsal time, cancellation of live performances, limited access to technology; reduction or cancellation of extra-curricular ensembles; cancellation of music-related travel; reduced ability to recruit incoming band members; elimination of band class; school schedule change; overall school enrollment decline; and other factors.

The three factors that directors reported had the strongest effect on enrollment were online/remote learning, a decrease in live rehearsal time, and decreased social interaction among ensemble members. Thirty-five (45.5%, $n = 35$) of the respondents believed that online/remote learning was a very strong factor, thirteen (16.9%; $n = 13$) respondents indicated it was strong factor, eight (10.4%, $n = 8$) reported it was a moderate factor, eleven (14.3%; $n = 11$) believed it was a small factor, and six (7.8%; $n = 6$) participants felt that this factor was not applicable (see figure 29). Twenty-six (33.8%; $n = 26$) believed that a decrease in live rehearsal time was a very strong factor, sixteen (20.8%; $n = 16$) reported that it was a strong factor, ten (13%, $n = 10$) indicated that it was a moderate factor, eleven (14.3%) thought it was a minimal factor, and ten (13%; $n = 10$) felt it was not a factor or not applicable to their situation (see figure 31). Twenty-seven (35.1%; $n = 27$) directors indicated that decreased social interaction among members of the ensemble was a very strong factor, nine (11.7%; $n = 9$) reported it was a strong factor, seventeen (22.1%; $n = 17$) held it was a moderate factor, eleven (14.3%; $n = 11$) believed it was a minimal factor, and nine (11.7%; $n = 9$) indicated it was not a factor or not applicable to their situation (see figure 28). All individual factors included in the survey are outlined below.

Parental Concerns Related to Health and Safety

Most participants indicated that parental concerns related to health and safety were either not a factor/not applicable or a minimal factor in perceived decreased enrollment (see figure 20). Twenty-two participants (28.6%; $n = 22$) indicated that this was either not a factor or not

applicable to their program’s situation. In comparison, thirty-three participants (42.9%, $n = 33$) felt that this was a minimal factor in their program’s decreased enrollment. Twelve (15.6%; $n = 12$) cited this aspect as a moderate factor in decreased enrollment, and three participants each reported this was a strong factor (3.9%; $n = 3$) or very strong factor (3.9%; $n = 3$) in their band program’s decreased enrollment. Figure 20 shows the results of band director feedback on the factor of parental concerns related to health and safety.

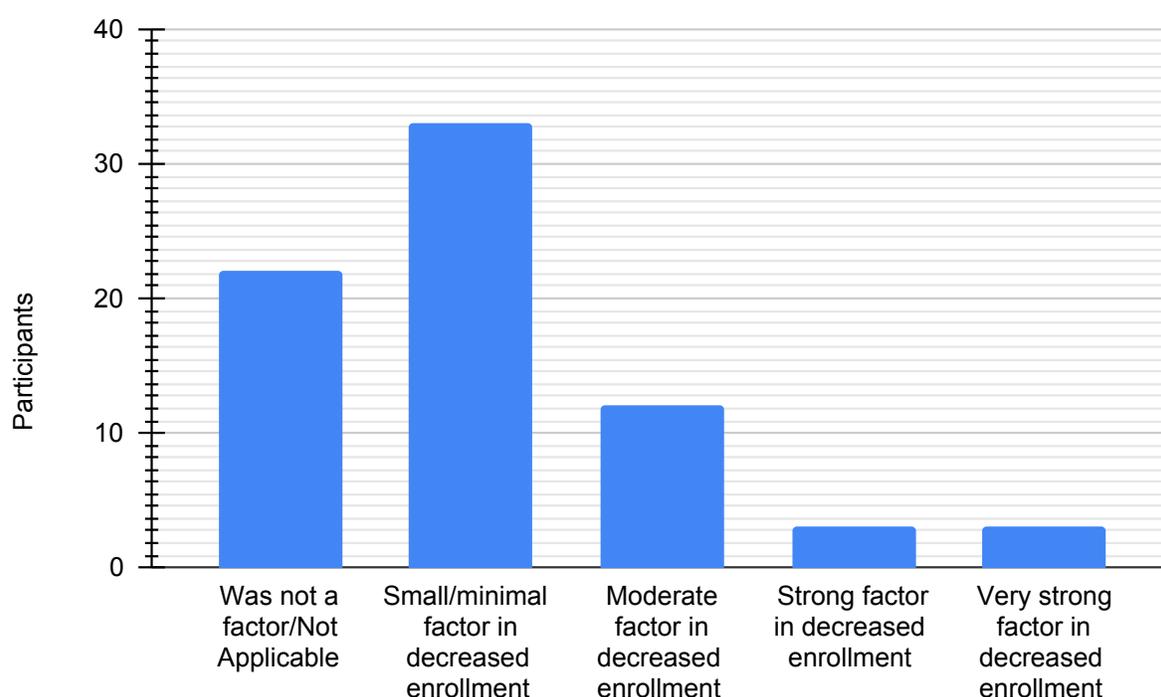


Figure 20. Parental Concerns Related to Health and Safety.²²²

Social Distancing/Spacing Within the Ensemble

The “Minnesota Safe Learning Plan for the 2020-21 School Year” mandated that all students, including instrumentalists, should be seated six feet from each other to properly social

²²² Figure created by Matthew G. Marsolek.

distance.²²³ Most study participants indicated that social distancing or adjusted spacing in ensembles was either not a factor/not applicable or a minimal factor in perceived decreased enrollment (see figure 21). Twenty-two participants (28.6%; $n = 22$) indicated that this was either not a factor or not applicable to their program’s situation, while twenty-five participants (32.5%; $n = 25$) indicated a belief that this was a minimal factor in their program’s decreased enrollment. Seventeen (22.1%; $n = 17$) cited this aspect as a moderate factor in decreased enrollment. Four participants (5.2%; $n = 4$) believed this was a strong factor, and five (6.5%; $n = 5$) reported it was a very strong factor in their band program’s decreased enrollment. Figure 21 shows the results of band director feedback on the factor of social distancing/spacing within the ensemble.

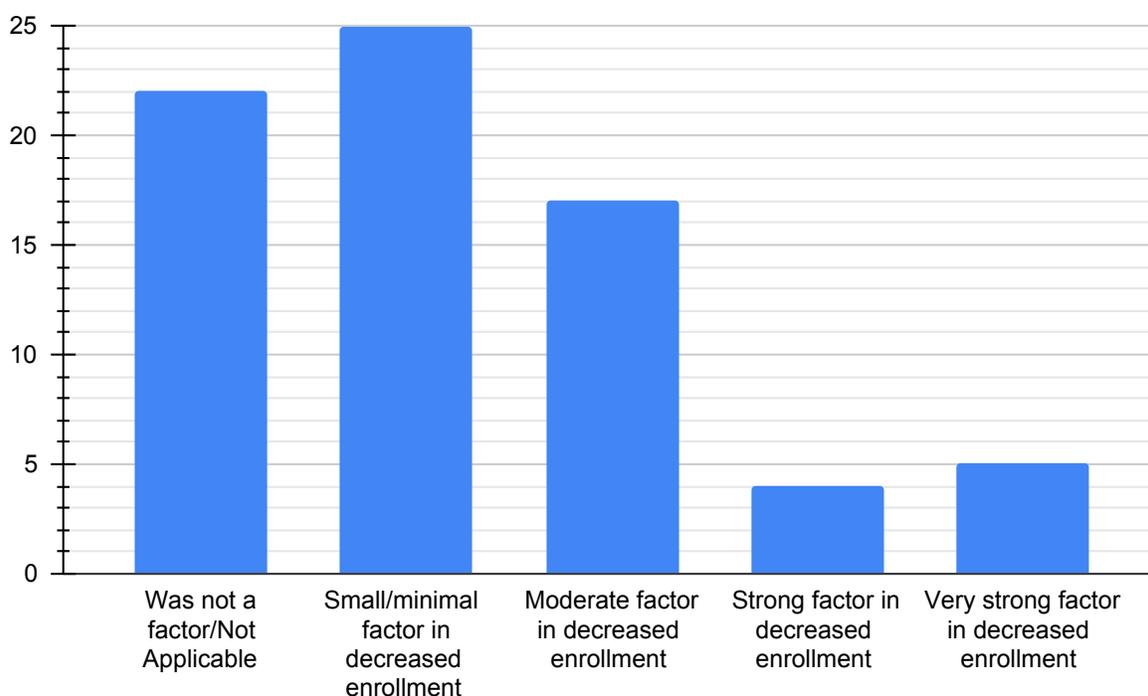


Figure 21. Social Distancing/Spacing Within the Ensemble.²²⁴

²²³ Minnesota Department of Education, “Safe Learning Plan for 2020–2021,” p11.

²²⁴ Figure created by Matthew G. Marsolek.

Personal Protective Equipment (Specialized musician masks, bell covers, etc.)

Most participants indicated that this factor had no to minimal impact on band enrollment. Thirty directors (39%; $n = 30$) indicated that this was not a factor or not applicable to band enrollment, and twenty (26%; $n = 20$) indicated that it was a small or minimal factor. Twelve (15.6%; $n = 12$) believed that PPE was a moderate factor, eight (10.4%; $n = 8$) indicated it was a strong factor, and three (3.9%; $n = 3$) held it was a very strong factor in band program enrollment. Figure 22 shows the results of band director feedback on the factor of using personal protective equipment (PPE) in band.

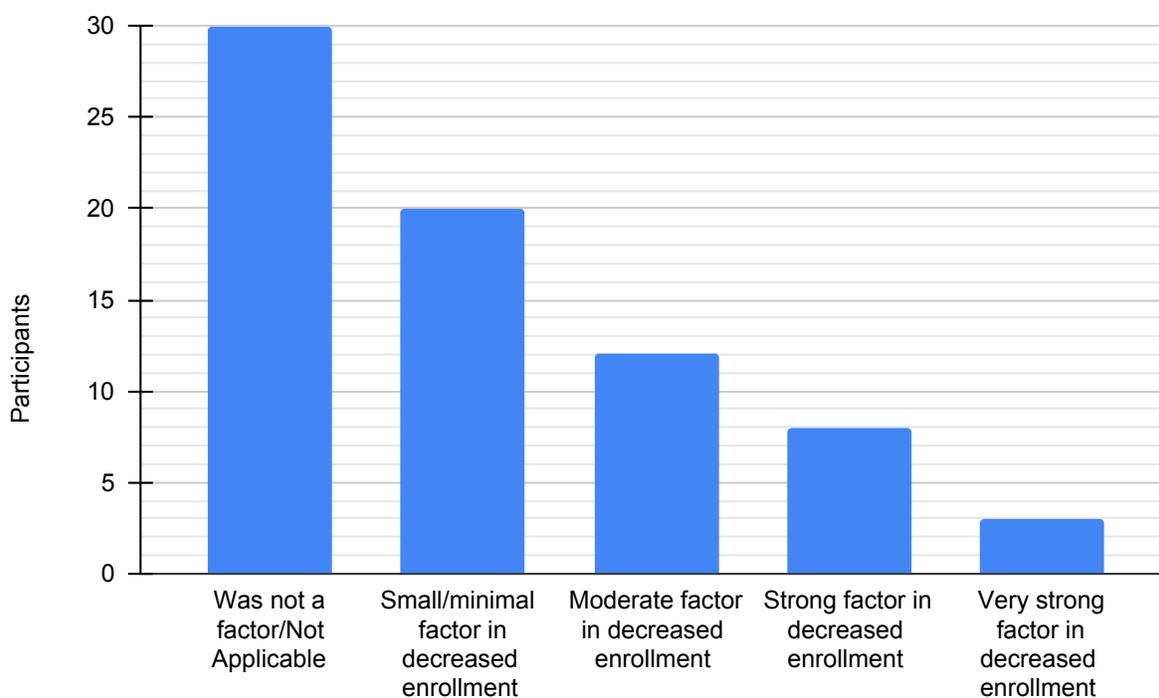


Figure 22. Personal Protective Equipment.²²⁵

²²⁵ Figure created by Matthew G. Marsolek.

Reduced Ensemble Capacity in Rooms/Reduced Class Size

Most participants indicated that the need to reduce ensemble capacity or class size to fit members in the room due to increased physical distancing was either not a factor or a minimal factor in decreased band program enrollment. Twenty-eight directors (36.4%; $n = 28$) believed this was not a factor or not applicable to their situation. Seventeen (22.1%; $n = 17$) reported that this was a minimal factor, and nine (11.7%; $n = 9$) indicated it as a moderate factor. Thirteen (16.9%; $n = 13$) felt this was a strong factor in decreased band program enrollment, while six (7.8%; $n = 6$) indicated that this was a very strong factor. Figure 23 shows the results of band director feedback on the factor of reduced ensemble capacity in rooms and/or reduced class size.

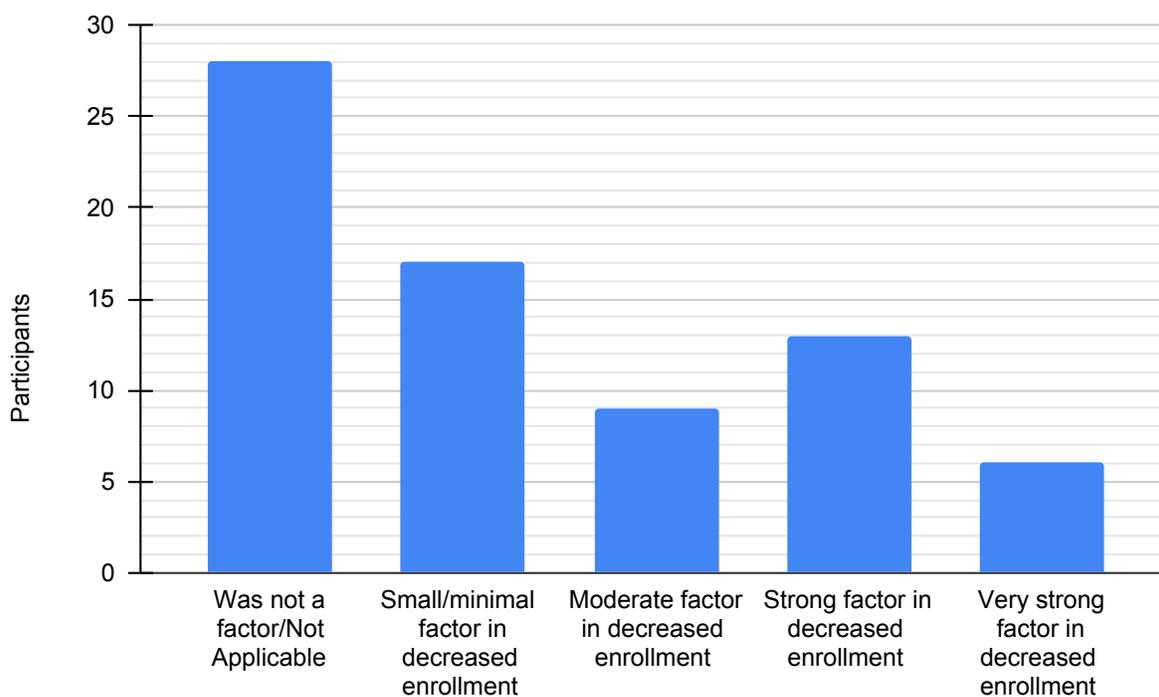


Figure 23. Reduced Ensemble Capacity in Rooms/Reduced Class Size.²²⁶

²²⁶ Figure created by Matthew G. Marsolek.

Required use of Flex or Alternate Literature Due to Ensemble Make-Up

Most participants indicated that using pieces with flexible instrumentation (flex) or other alternative music arrangements due to changes in ensemble make-up was either not a factor or a small or minimal factor. Thirty-three directors (42.9%; $n = 33$) reported this factor as not being applicable, and eighteen (23.4%; $n = 18$) reported that this may have been a small or minimal factor. The belief that this factor moderately affected enrollment was reported by twelve directors (15.6%; $n = 12$). Seven (9.1%; $n = 7$) held this was a strong factor, and three directors (3.9%; $n = 3$) reported this as a strong factor in decreased band program enrollment. Figure 24 shows the results of band director feedback on the factor of having to use flex or alternate literature due to changes in ensemble make-up.

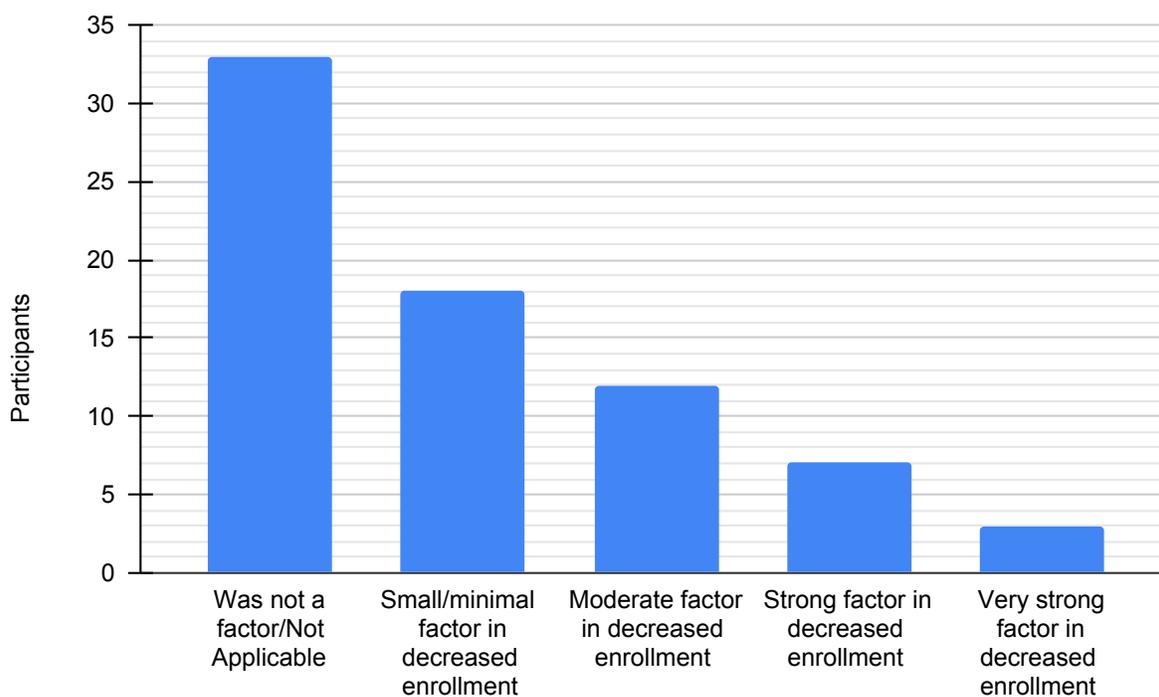


Figure 24. Flex or Alternate Literature.²²⁷

²²⁷ Figure created by Matthew G. Marsolek.

Decreased Level of Musicianship Within Ensembles

Most respondents reported that a decreased level of musicianship within their ensembles was either a moderate, strong, or very strong factor in decreased band program enrollment. Eleven directors (14.3%; $n = 11$) indicated that this was a very strong factor, seventeen (22.1%; $n = 17$) a strong factor, and fourteen (18.2%; $n = 14$) a moderate factor. Twenty-two (28.6%; $n = 22$) reported this was a minimal factor, while nine (11.7%; $n = 9$) believed this was either not a factor or not applicable to their situation. Figure 25 shows the results of band director feedback on the factor of their ensemble's decreased level of musicianship.

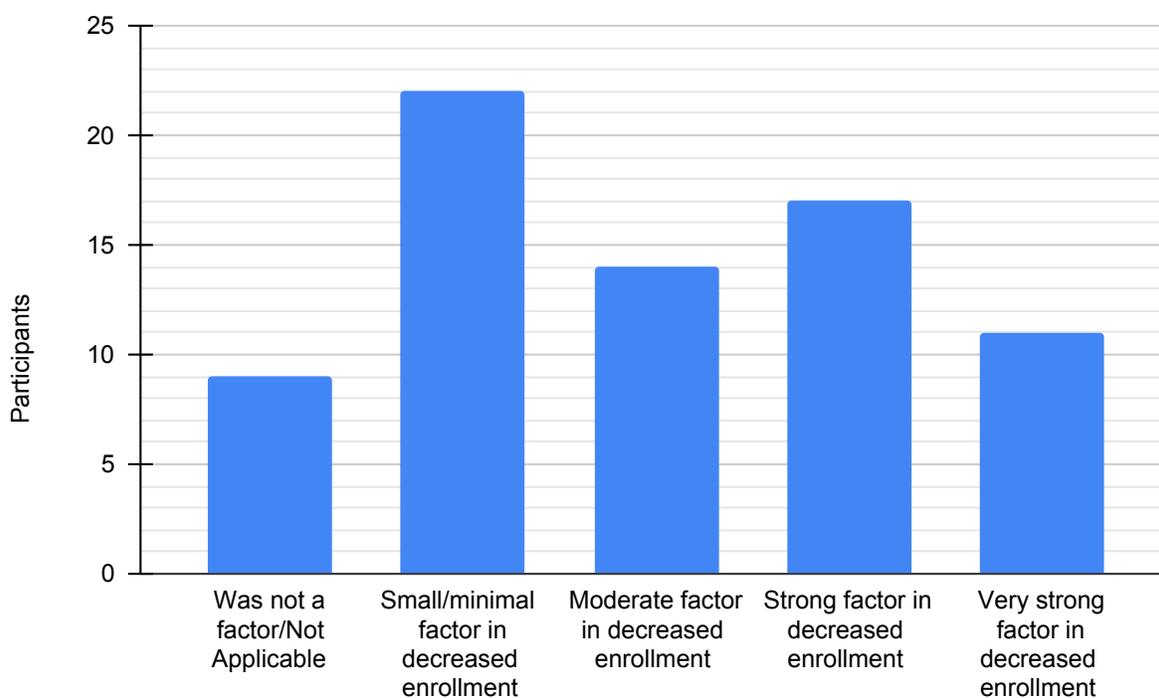


Figure 25. Decreased Level of Musicianship.²²⁸

²²⁸ Figure created by Matthew G. Marsolek.

Relocation of Rehearsal Space

Due to COVID-19 pandemic restrictions related to ventilation or physical distancing, ensemble rehearsals and performances were relocated to larger spaces such as gymnasiums or outdoor spaces. Thirty-three directors (42.9%; $n = 33$) reported that this was not a factor or not applicable to their situation. Fifteen (18.9%; $n = 15$) believed this was a minimal factor in band program enrollment, and ten (13%; $n = 10$) indicated it to be a moderate factor. Nine (11.7%; $n = 9$) reported that this was a strong factor for their programs, and six (7.8%; $n = 6$) indicated it was a very strong factor. Figure 26 shows the results of band director feedback on the factor of relocation of rehearsal space.

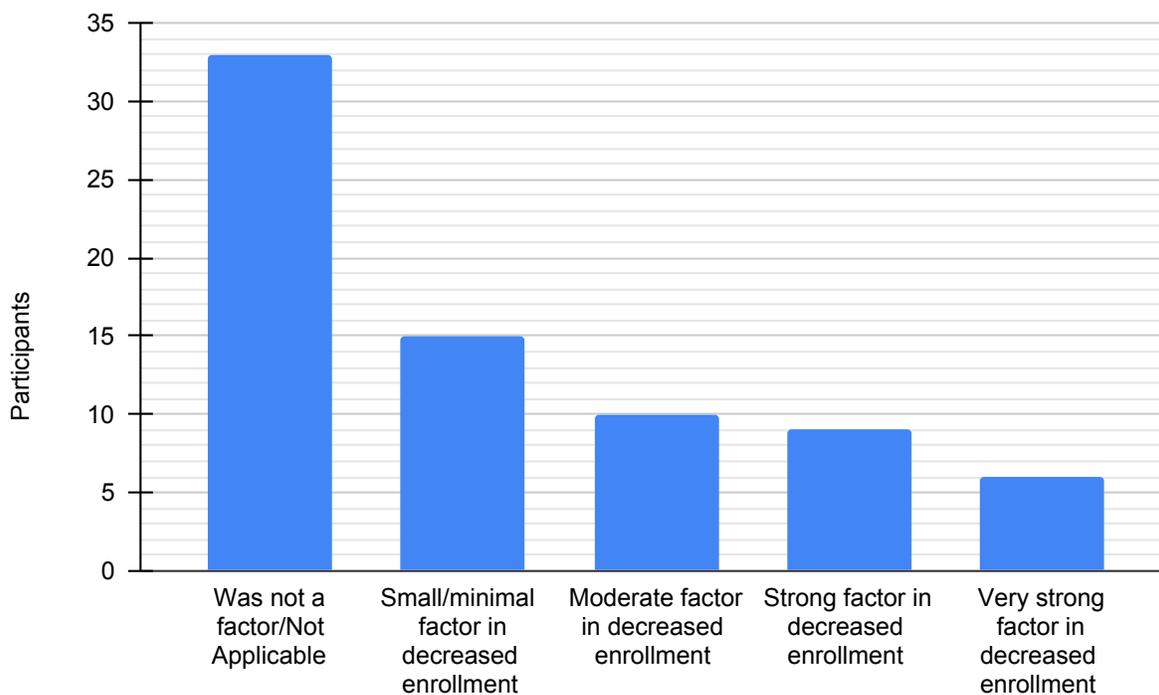


Figure 26. Relocation of Rehearsal Space.²²⁹

²²⁹ Figure created by Matthew G. Marsolek.

Additional Sanitation Procedures

Most respondents reported that additional sanitation procedures were either not a factor or a minimal factor in band program participation. Thirty-one participants (40.3%; $n = 31$) reported that additional sanitation procedures were not a factor or not applicable, and twenty-five participants (32.5%; $n = 25$) indicated that these measures were a minimal factor in band program participation. Eight directors (10.4%; $n = 8$) reported that this was a moderate factor, seven (9.1%; $n = 7$) reported this as a strong factor, and two (2.6%; $n = 2$) indicated additional sanitation procedures as a very strong factor in band program participation. Figure 27 shows the results of band director feedback on the factor of having to use additional sanitation procedures.

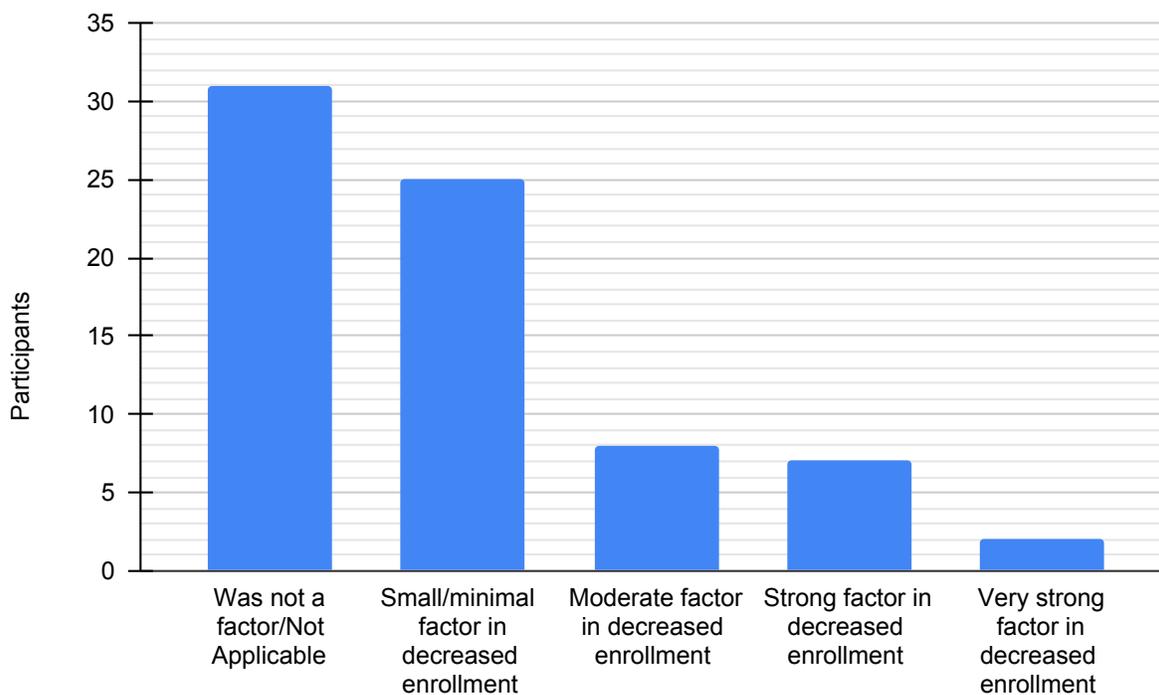


Figure 27. Additional Sanitation Procedures.²³⁰

²³⁰ Figure created by Matthew G. Marsolek.

Decreased Social Interaction Among Members of the Ensemble

Many directors believed that the decreased social interaction among members of their ensembles played a part in decreased band program enrollment. Twenty-seven directors (35.1%; $n = 27$) reported that this was a very strong factor, nine (11.7%; $n = 9$) indicated this was a strong factor, and seventeen (22.1%; $n = 17$) felt that this was a moderate factor in decreased band program participation. Eleven directors (14.3%; $n = 11$) reported that this was a minimal factor, and nine (11.7%; $n = 9$) believed that this was either not applicable or not a factor for their program. Figure 28 shows the results of band director feedback on the factor of decreased social interaction among members of the ensemble.

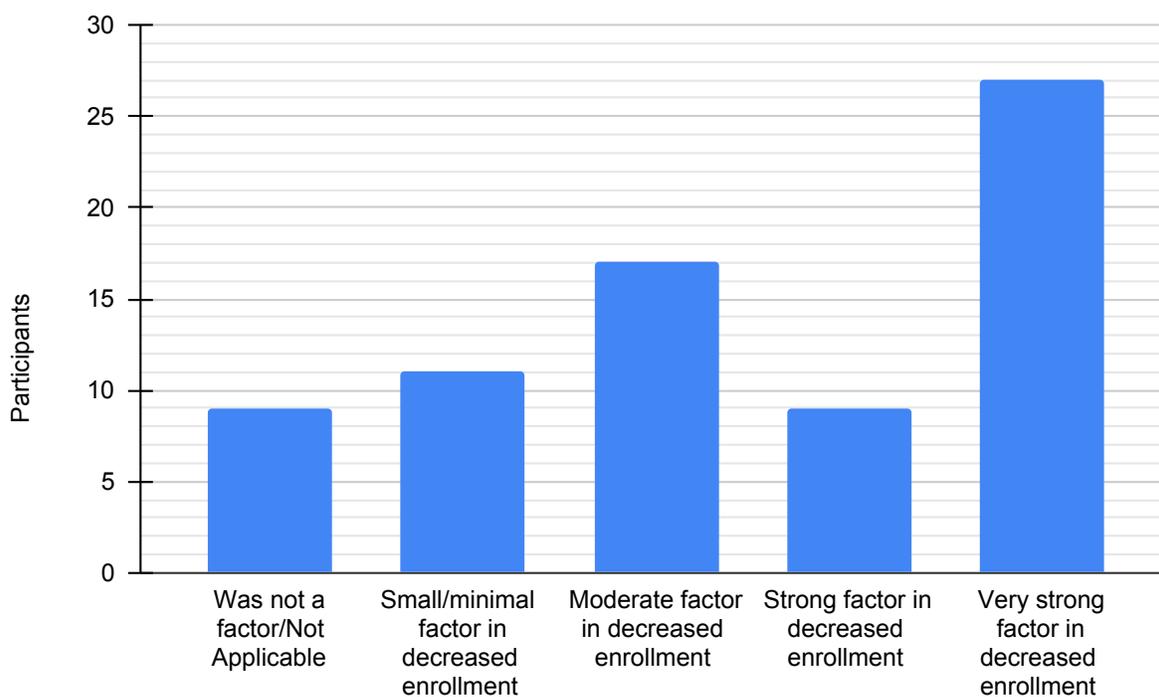


Figure 28. Decreased Social Interaction Among Members of the Ensemble.²³¹

²³¹ Figure created by Matthew G. Marsolek.

Online/Remote Learning

The majority of directors believed that online/remote learning was either a strong or very strong factor in reduced band program participation during the COVID-19 pandemic. Thirty-five directors (45.5%; $n = 35$) claimed that this was a very strong factor in decreased enrollment, which made this factor the highest reported as a very strong factor by directors in this study. Thirteen directors (16.9%; $n = 13$) believed this was a strong factor, and eight (10.4%; $n = 8$) reported that this was a moderate factor. Eleven directors (14.3%; $n = 11$) reported that online/remote learning was a minimal factor, while six directors (7.8%; $n = 6$) indicated that this was not a factor or not applicable to their situation. Figure 29 shows the results of band director feedback on the factor of online/remote learning.

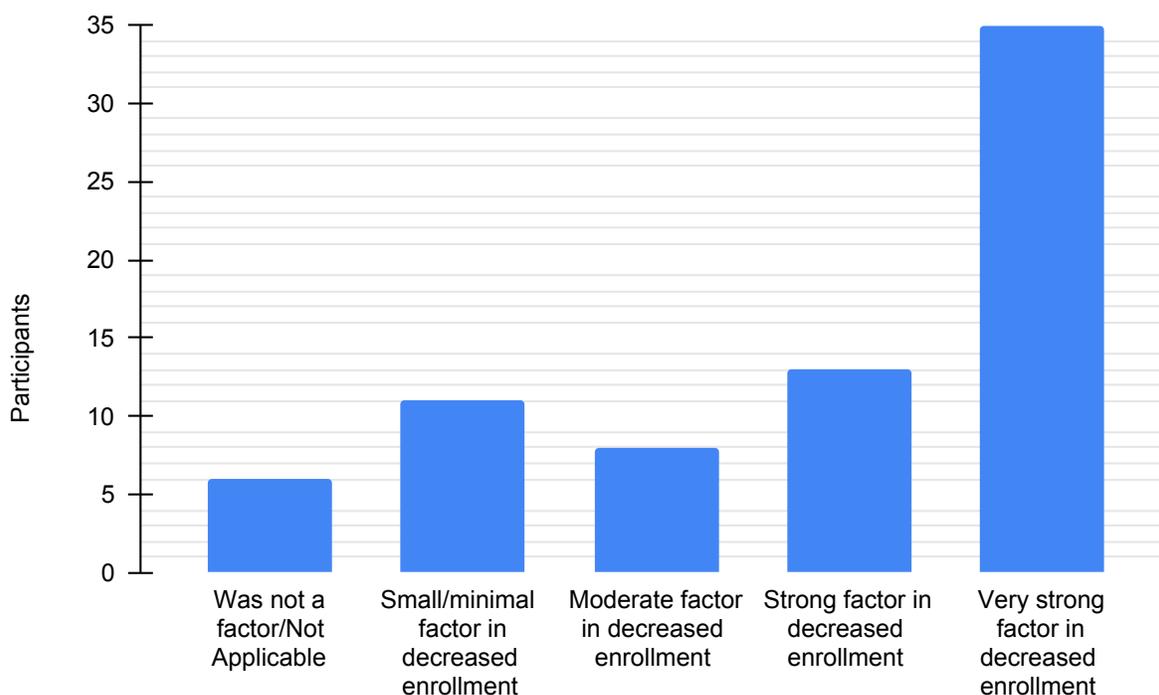


Figure 29. Online/Remote Learning.²³²

²³² Figure created by Matthew G. Marsolek.

Hybrid Learning Model

Directors were more evenly split on their feedback about the hybrid learning model's effect on their band program enrollment. Thirteen directors (16.9%; $n = 13$) reported that hybrid learning was not a factor or not applicable to their situation. Twelve (15.6%; $n = 12$) reported that this was a minimal factor. Twelve directors (15.6; $n = 12$) reported that the hybrid learning model was a moderate factor, twenty (26%; $n = 20$) a strong factor, and sixteen (20.1%; $n = 16$) a very strong factor in reduced band program participation. Figure 30 shows the results of band director feedback on the factor of the hybrid learning model.

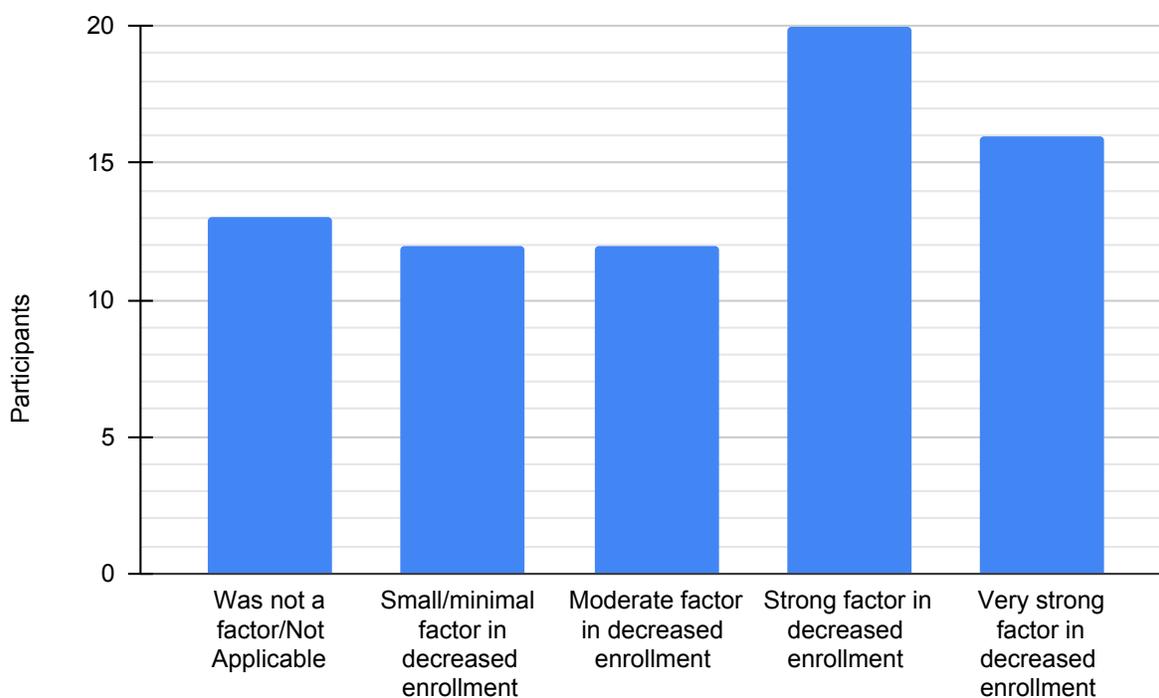


Figure 30. Hybrid Learning Model.²³³

²³³ Figure created by Matthew G. Marsolek.

Decrease In Live Rehearsal Time

The majority of directors reported their belief that a decrease in live rehearsal time was a moderate to very strong factor in the decrease in their band program's enrollment. Twenty-six directors (33.8%; $n = 26$) cited decrease in live rehearsal time as a very strong factor, which made this factor the third highest reported as a very strong factor by directors in this study. Sixteen directors (20.8%; $n = 16$) reported that this was a strong factor in program participation, and ten (13%; $n = 10$) cited this reason as a moderate factor. Eleven directors (14.3%; $n = 11$) reported that a decrease in life rehearsal time was a minimal factor, and ten (13%; $n = 10$) directors reported that this was either not a factor or not applicable to their situation. Figure 31 shows the results of band director feedback on the factor of decrease in live rehearsal time.

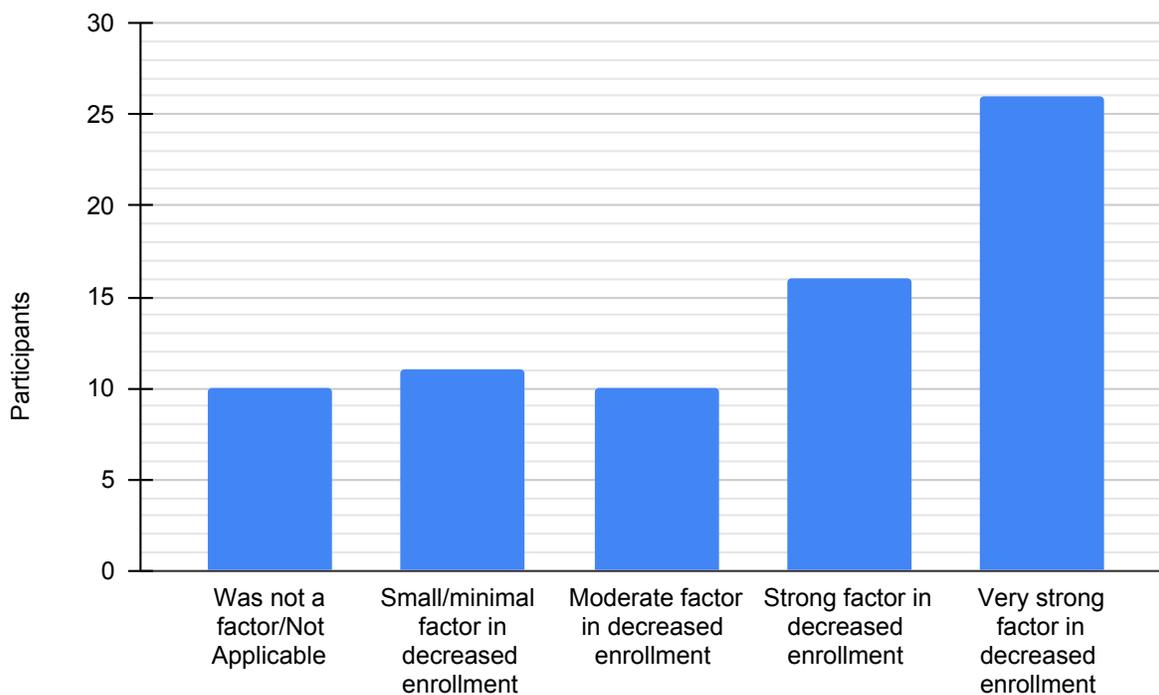


Figure 31. Decrease In Live Rehearsal Time.²³⁴

²³⁴ Figure created by Matthew G. Marsolek.

Cancellation of Live Performances

Many live performances were canceled or adjusted in many cases due to social gathering restrictions put in place due to the COVID-19 pandemic. Band directors were evenly split on this factor, with thirteen (16.9%; $n = 13$) reporting that this was either not a factor or not applicable to their situation and eleven (14.3%; $n = 11$) reporting that this was a minimal factor in band program participation. Seventeen directors (22.1%; $n = 17$) indicated that the cancellation of live performances was a moderate factor, fourteen (18.2%; $n = 14$) reported that it was a strong factor, and eighteen (23.4%; $n = 18$) reported that it was a very strong factor in the reduction in band program enrollment. Figure 32 shows the results of band director feedback on the factor of the cancellation of live performances.

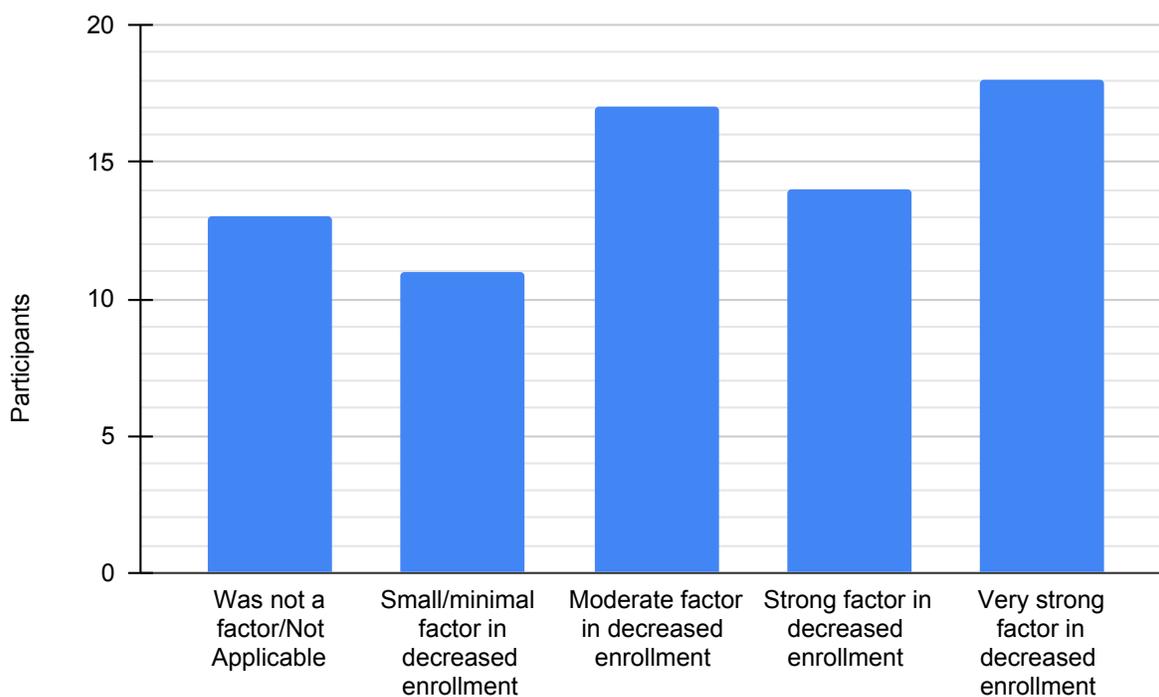


Figure 32. Cancellation of Live Performances.²³⁵

²³⁵ Figure created by Matthew G. Marsolek.

Limited Access to Technology

Technology played a large part in education during the COVID-19 pandemic. Even so, most band directors reported that limited access to technology was not a determining factor for the negative change in enrollment to their band programs. Thirty-one directors (40.3%; $n = 31$) reported that limited access to technology was either not a factor or not applicable to their situation. Twenty-seven directors (35.1%; $n = 27$) reported that it was a minimal factor in their program's decreased enrollment. Nine directors (11.7%; $n = 9$) reported that limited technology access was a moderate factor, three (3.9%; $n = 3$) believed it was a strong factor, and three (3.9%; $n = 3$) believed it was a very strong factor in their band program's decreased enrollment. Figure 33 shows the results of band director feedback on the factor of limited access to technology.

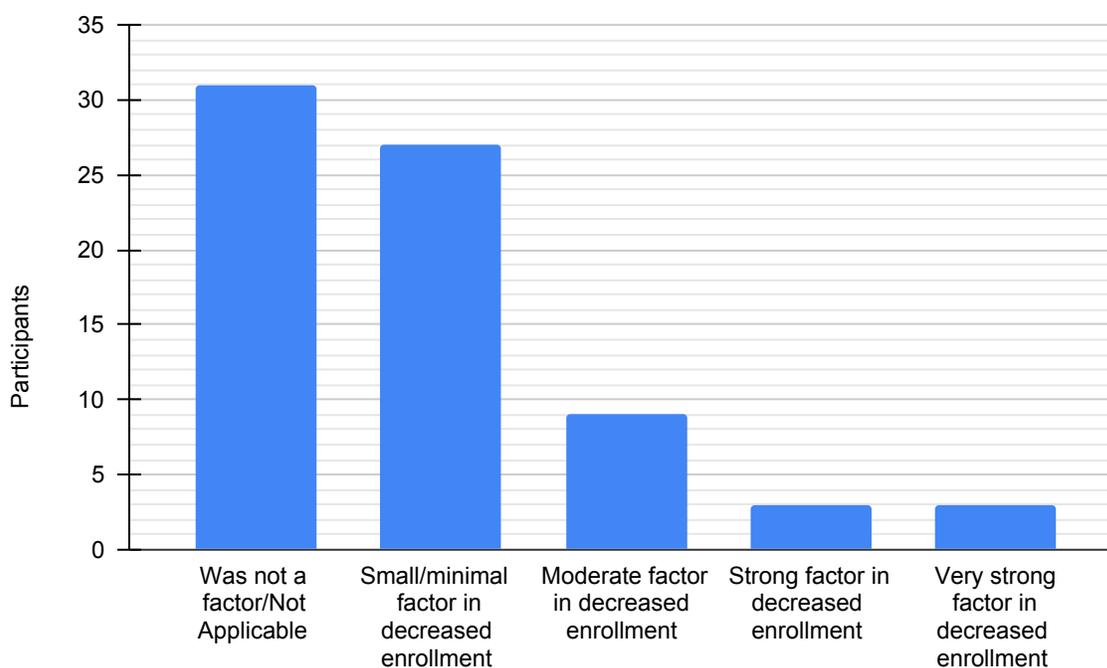


Figure 33. Limited Access to Technology.²³⁶

²³⁶ Figure created by Matthew G. Marsolek.

Reduction or Cancellation of Extra-Curricular Ensembles

Many band programs offer music ensembles beyond the curricular school day. Band directors were evenly split on whether the reduction or cancellation of these extra-curricular ensembles had a negative effect on their program's enrollment. Eighteen directors (23.4%; $n = 18$) reported that the reduction or cancellation of extra-curricular ensembles was either not applicable to their situation or not a factor and fourteen directors (18.2%; $n = 14$) reported that this was a minimal factor. Twenty directors (26%; $n = 20$) reported that the reduction or cancellation of extra-curricular ensembles was a moderate factor in reduced band program participation, twelve directors (15.6%; $n = 12$) believed that it was a strong factor, and nine directors (11.7%; $n = 9$) indicated it was a very strong factor. Figure 34 shows the results of band director feedback on the factor of reduction or cancellation of extra-curricular ensembles.

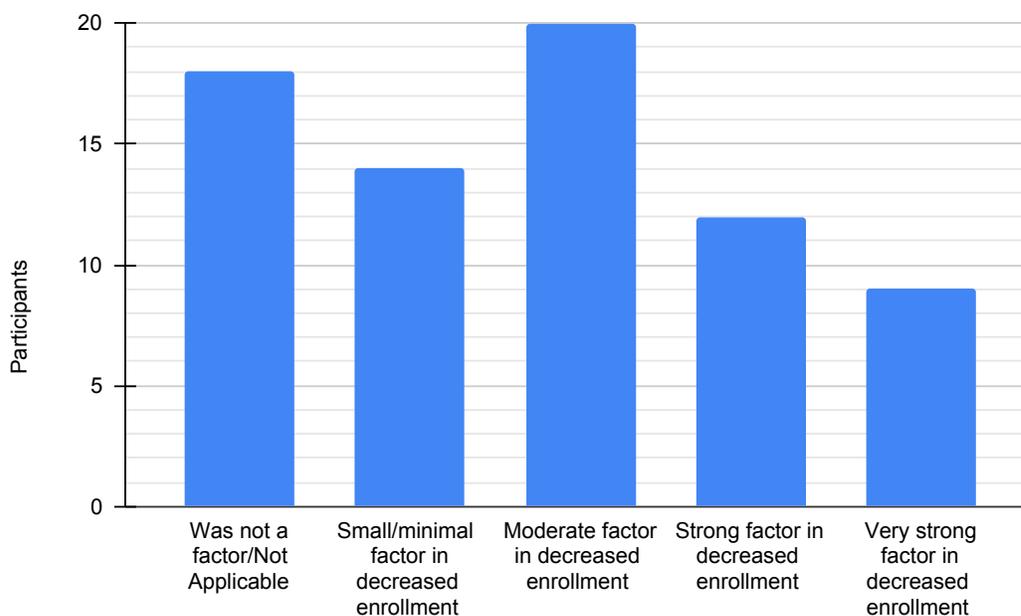


Figure 34. Reduction or Cancellation of Extra-Curricular Ensembles.²³⁷

²³⁷ Figure created by Matthew G. Marsolek.

Cancellation of Music-Related Travel

Some band programs include performance travel as part of their curricular band program. As a result of the COVID-19 pandemic, many performance tours were postponed or cancelled. Most band directors reported that music-related travel was either not a factor or a minimal factor. Eighteen band directors (23.4%; $n = 18$) reported that this was not a factor or not applicable to their situation, and twenty-two (28.6%; $n = 22$) reported that this was a minimal factor in a reducing band program participation. Twelve directors (15.6%; $n = 12$) believed that the cancellation of music-related travel was a moderate factor, eleven directors (14.3%; $n = 11$) indicated that it was a strong factor, and ten directors (13%; $n = 10$) reported that it was a very strong factor in the decrease in their band program's enrollment. Figure 35 shows the results of band director feedback on the factor of cancellation of music-related travel.

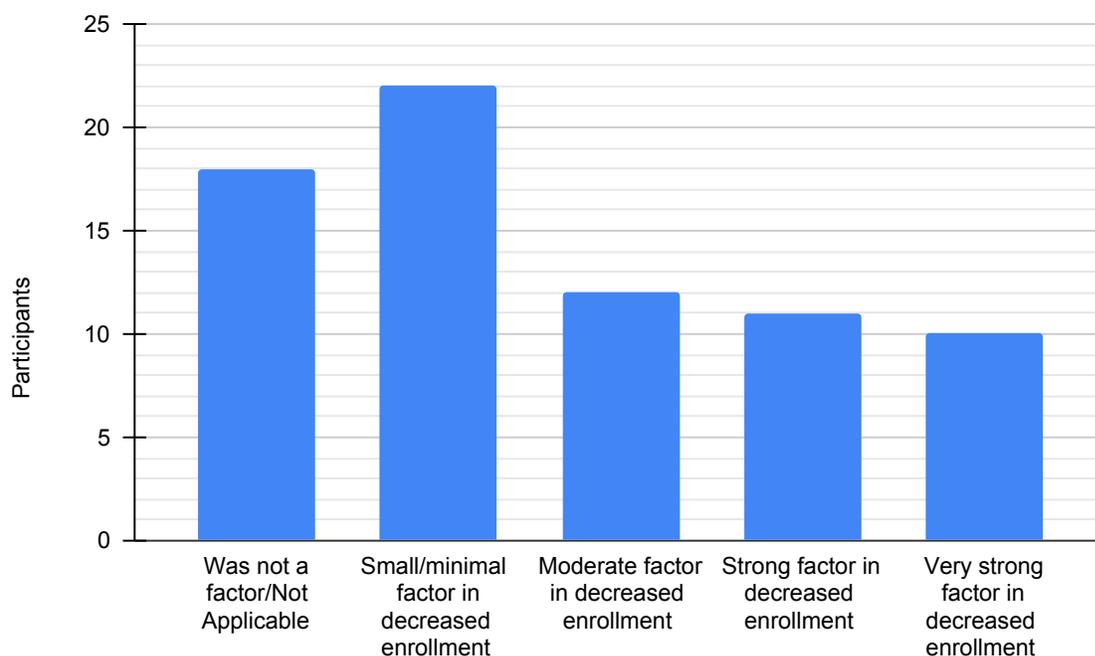


Figure 35. Cancellation of Music-Related Travel.²³⁸

²³⁸ Figure created by Matthew G. Marsolek.

Reduced Ability to Recruit Incoming Band Members

Most directors reported that their reduced ability to recruit incoming band members hurt their program's enrollment. Twenty directors (26%; $n = 20$) reported that the reduced ability to recruit incoming band members was a very strong factor in their program's reduced enrollment, seventeen directors (22.1%; $n = 17$) reported that it was a strong factor, and twelve (15.6%; $n = 12$) reported that it was a moderate factor. Eleven directors (14.3%; $n = 11$) believed that the reduced ability to recruit incoming band members was minimal, while thirteen directors (16.9%; $n = 13$) reported that it was either not a factor or that the factor was not applicable to their program. Figure 36 shows the results of band director feedback on the factor of reduced ability to recruit incoming band members.

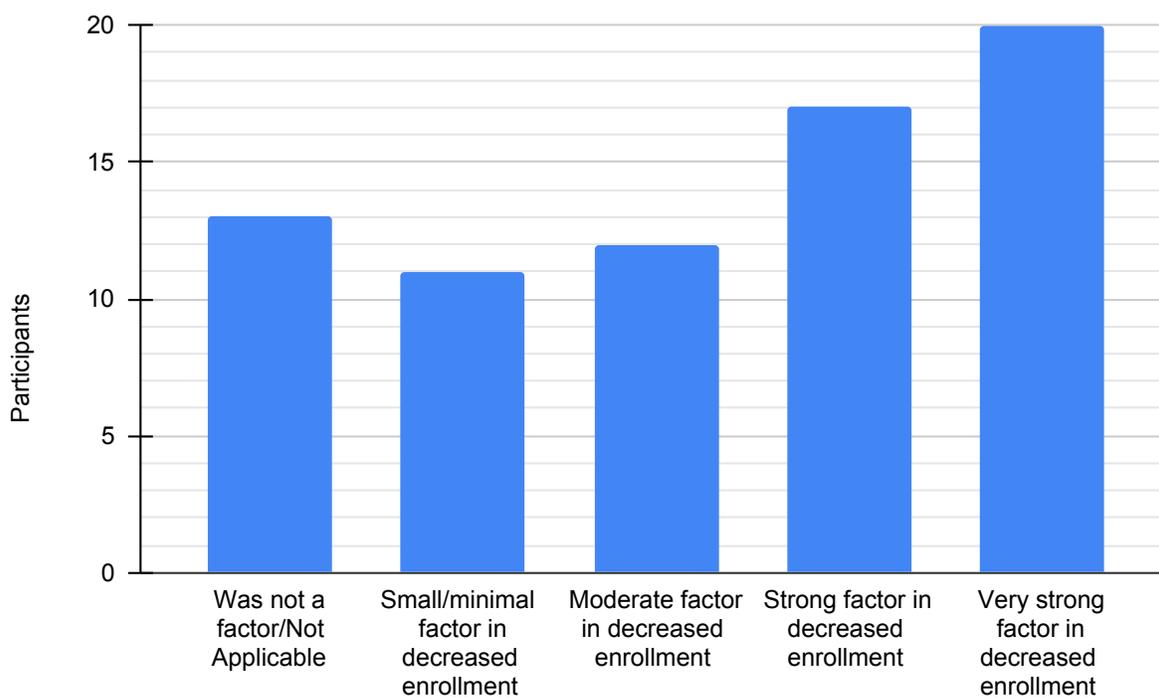


Figure 36. Reduced Ability to Recruit Incoming Band Members.²³⁹

²³⁹ Figure created by Matthew G. Marsolek.

Elimination of Band Class

The majority of directors reported that the elimination of their curricular band class was not a factor. Sixty-three directors (81.8%; $n = 63$) reported that eliminating band as a class was either not a factor or not applicable to their program's situation. Three directors (3.9%; $n = 3$) reported the elimination of band class as a minimal factor, two directors (2.6%; $n = 2$) reported it as a moderate factor, two directors (2.6%; $n = 2$) reported it as a strong factor, and three directors (3.9%; $n = 3$) reported it as a very strong factor leading to the reduced enrollment in their band programs. Figure 37 shows the results of band director feedback on the factor of the elimination of band class.

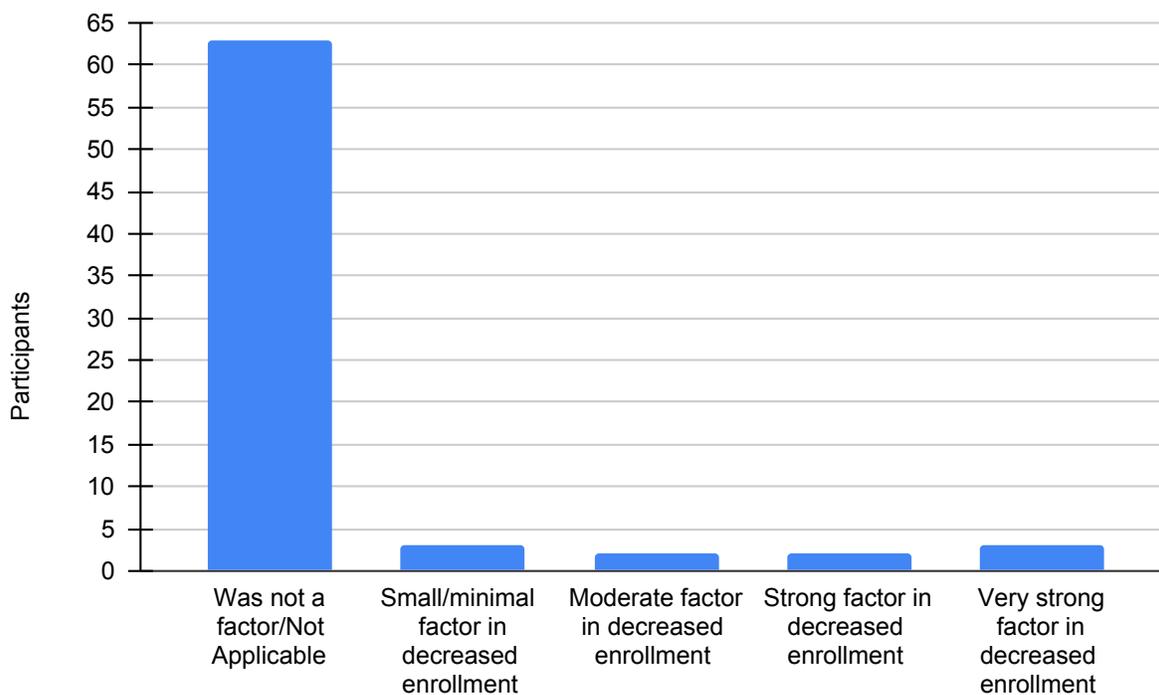


Figure 37. Elimination of Band Class.²⁴⁰

²⁴⁰ Figure created by Matthew G. Marsolek.

School Schedule Change

Most directors reported that a school schedule change during the COVID-19 pandemic either did not affect their band program enrollment or did so in a minimal manner. Thirty-five band directors (45.5%; $n = 35$) reported that a school schedule change was not a factor or not applicable to their situations, and thirteen directors (16.9%; $n = 13$) reported that it had a minimal effect on the reduction in band program enrollment. Ten directors (13%; $n = 10$) believe that a school schedule change had a moderate impact on band program enrollment, nine directors (11.7%; $n = 9$) felt that it had a strong effect on enrollment, and six directors (7.8%; $n = 6$) indicated it was a very strong factor on reducing band program enrollment. Figure 38 shows the results of band director feedback on the factor of a school schedule change.

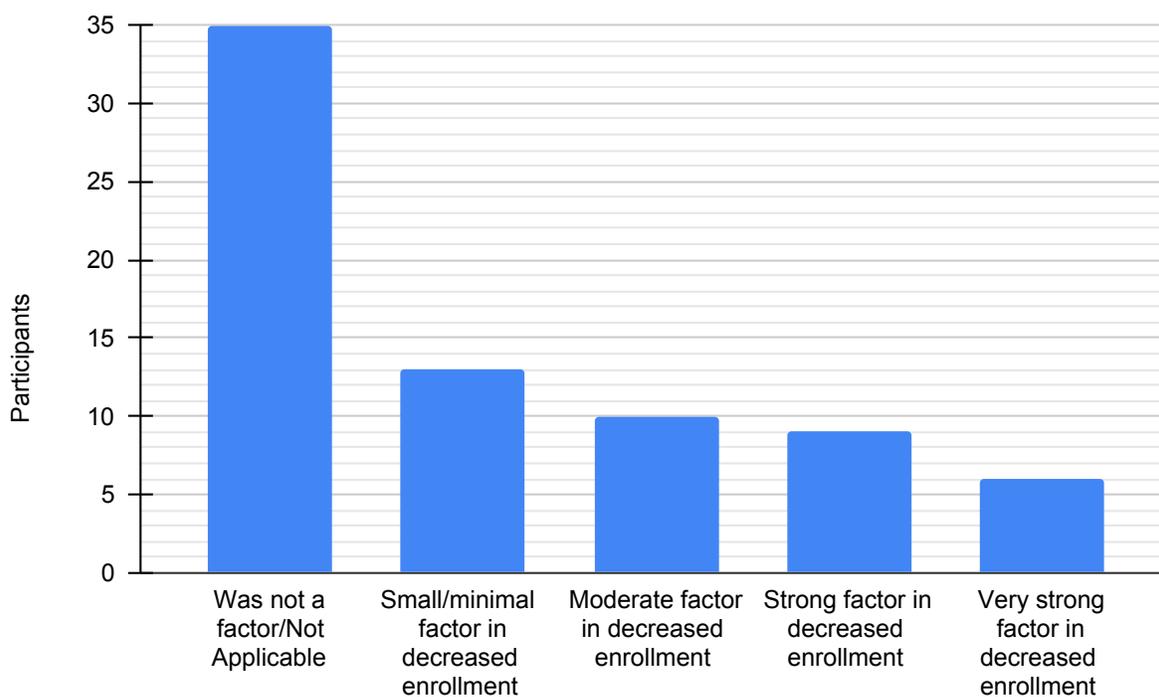


Figure 38. School Schedule Change.²⁴¹

²⁴¹ Figure created by Matthew G. Marsolek.

Overall School Enrollment Decline

One important factor in considering the reduction in band program enrollment is that of overall school enrollment decline, a reason which most band directors reported being minimal or not a factor in the reduction of their band program's enrollment. Thirty-six band directors (46.8%; $n = 36$) reported that overall school enrollment decline was not a factor or not applicable to their situation, and sixteen (20.8%; $n = 16$) reported that it was a minimal factor in their band program's reduced enrollment. Ten band directors (13%; $n = 10$) believed that an overall school enrollment decline was a moderate factor, eight directors (10.4%; $n = 8$) reported that it was a strong factor, and three directors (3.9%; $n = 3$) reported that it was a very strong factor in their band program's reduced participation. Figure 39 shows the results of band director feedback on the factor of overall school enrollment decline.

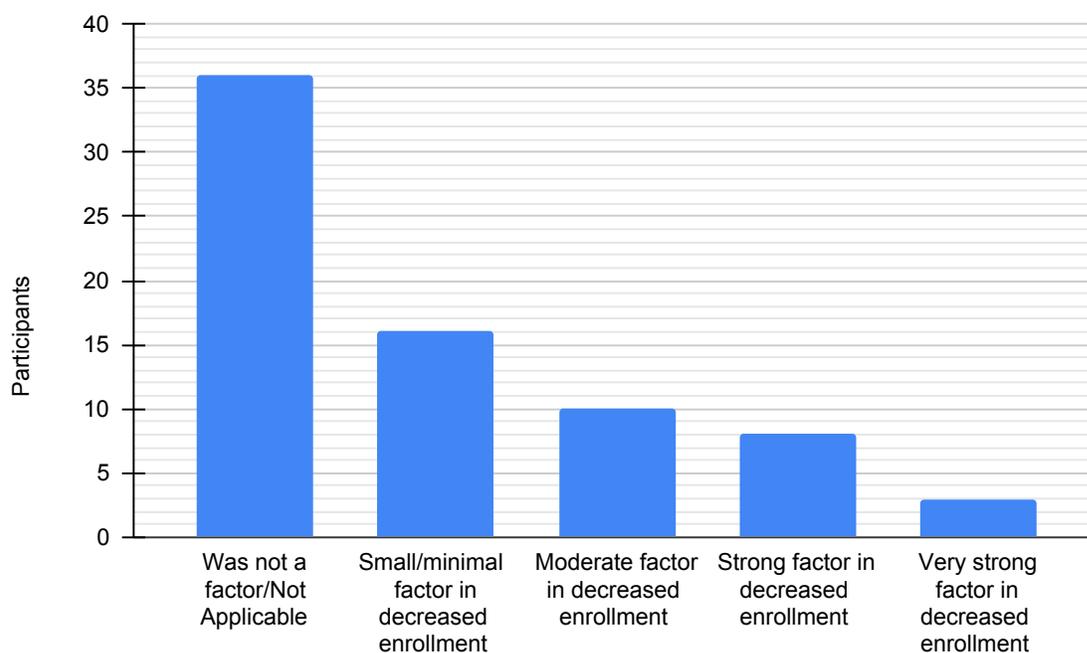


Figure 39. Overall School Enrollment Decline.²⁴²

²⁴² Figure created by Matthew G. Marsolek.

Other Factors

Participants were allowed to qualify their perceived factor for band enrollment decrease. Fifty-nine directors (76.6%; $n = 59$) reported that there were no additional factors, indicating that this option did not apply to their band program. Two band directors (2.6%; $n = 2$) indicated that other factors played a minimal role in their band program's reduced enrollment, while two directors (2.6%; $n = 2$) indicated other factors a moderate factor, four directors (5.2%; $n = 4$) as a strong factor, and six directors (7.8%; $n = 6$) as a very strong factor. Figure 30 shows the results of band director feedback on other factors not listed in the survey.

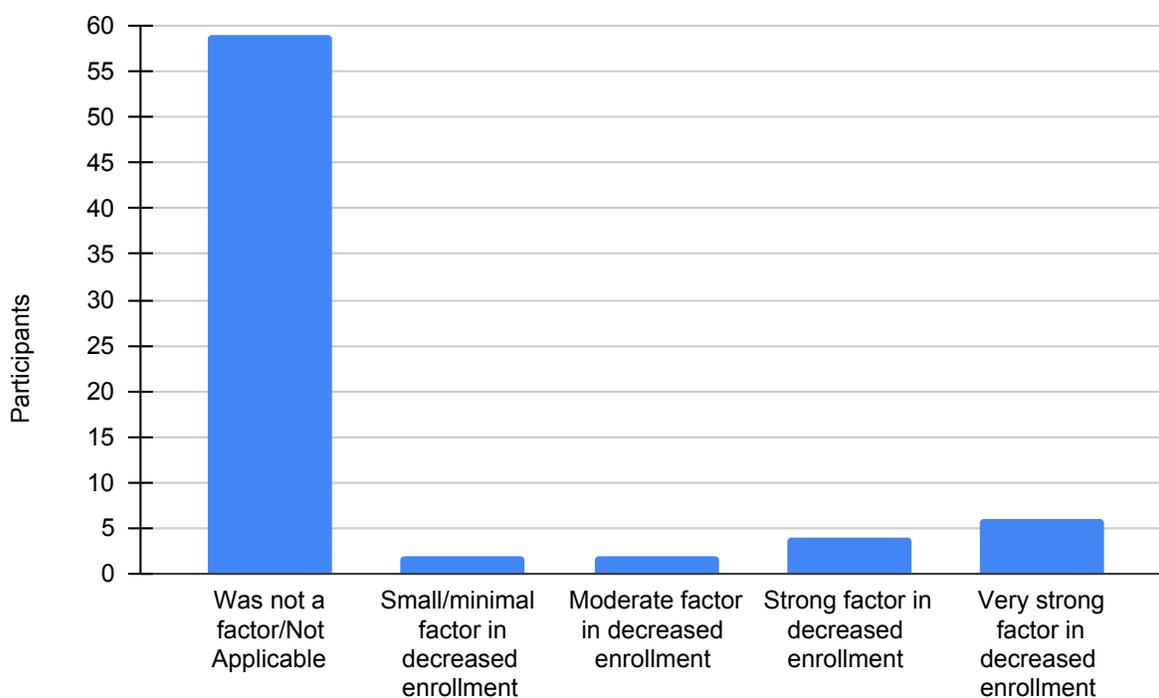


Figure 40. Other Factors.²⁴³

²⁴³ Figure created by Matthew G. Marsolek.

Survey Question 6: Other Factors Open-Ended Response

Survey participants were given a free-response option to identify the factors that they believe led to a reduction in band program participation and were not listed as an option within survey questions four and five. Sixteen participants ($n = 16$) responded to this open-ended question. Through coding the themes of relationships, distance learning, and no change emerged. In considering the first theme of relationships, multiple directors made references to a loss of “social interaction,” such as the loss of “relationship building between students/teachers and students/students,” and explaining the importance of “connection with others.” Many participants also cited distance learning as impacting band program participation, with one director citing “poor engagement and results with distance learning” and another explaining that “the biggest thing for us was the online remote learning...I believe I lost several students from my already small program.” A few directors also indicated that the 2020–2021 school year was run normally without COVID-19 pandemic restrictions, and that they did not see much of an impact on their programs.

Band directors’ open-ended responses explaining why they believe their band programs saw a reduction in band program enrollment are included below:

- “COVID didn't have much of an effect in my small, rural district. We ran the 2020-2021 school year as normally as possible. This school year is almost as normal as the 2019-2020 school year before the shutdown.”
- “I teach 7-12 band. We have not seen any issues at the high school level. We did not use bell covers or musician’s masks, etc. and we didn't get worked up over HVAC in the room or try to rehearse outside, etc. I insisted as the instructor that things be as normal as possible, ensembles and lessons continued, we did recording sessions

spaced out in the gym and we even did solo/ensemble contest and large group contest in an in-house format. 21-22 was a trip year for us and we went on a well-attended trip to Florida right after the omicron spike. We had better retention than we've ever had, and my students knew that their teacher was sensible and cautious, but never scared. However, at the 5-6 level, my colleague got worked up over HVAC, did band outside sometimes, avoided doing lessons in person for "safety" reasons, did no performances of any type, forced kids to use bell covers and the masks with holes in them, was scared to death, refused to be within 12 feet of others, etc. Her tactics have ruined the lower grades. Sensible people will always get good results from kids. Scared people looking for excuses NOT to work ruin programs.”

- “Combination of many of the above [factors included within the survey] and the social isolation led to many students telling me that they lost their passion.”
- “Culture/Political discourse resulting in a loss of trust of public institutions, including schools.”
- “I believe much of the learning that takes place in the band occurs between students and that students who not [sic] as talented benefit by sitting next to another student with stronger skills. This music and social interaction is what was lost during online band, it was tragic!”
- “Students have less drive to do anything but play games and social media.”
- “We had some drop due to fear of getting sick and missing out on dance and wrestling.”
- “Distracted by social media when not monitored at home so students got lazy.”

- “Distance Learning for one full calendar year (March 2020 - April 2021) was huge impact.”
- “Many students did not sign up for band in the Fall of 2020 as they were uncertain if they would be in distance learning similar to the spring of 2020.”
- “Lack of relationship building between students/teachers, students/students.”
- “Student's home life and ability to put in focused practice time with little to no guidance or support.”
- “After poor engagement and results with distance learning, students dropping band (and other electives) in order to make up credit in required areas. Also students dropping band after negative experience with band "online" and activities. Not interested in prospect of continued band "online" ... (and I don't blame them - nothing was like what we signed up for!).”
- “I think the biggest thing for us was the online remote learning at the end of the 2019-2020 school year. I believe I lost several students from my already small program, due to the fact that they don't do well working on their own at home, and they became very discouraged. I also believe that meeting together and having that connection with others, and hearing the progress that is made in live rehearsals is very motivating for all students, and when that was taken away, many students found it hard to continue working and doing Band.”

Survey Part 2: Band Program Offering Findings

The second part of the survey asked directors what impact, if any, they believed the COVID-19 pandemic had on their high school band program offerings for students. Directors answered two main questions, the first focusing on curricular band program offerings and the

second focusing on extracurricular program offerings, along with questions to help qualify their responses.

Survey Question 7: Impact of COVID-19 Pandemic Curricular Offerings

Survey question seven asked directors what impact they believed the COVID-19 pandemic had on their band program's curricular offerings between the 2019–2020 school year and the 2020–2021 school year. Directors answered the question using a five-point Likert-type scale which included the options: significant reduction in curricular program offerings, slight reduction in curricular program offerings, no effect/no noticeable impact on curricular program offerings, slight increase in curricular program offerings, and significant increase in curricular program offerings. Fifty-four directors (70%; $n = 54$) reported no effect or no noticeable impact on curricular program offerings. Fourteen participants (18%; $n = 14$) indicated a slight reduction in curricular program offerings, and five participants (6.5%; $n = 5$) indicated a significant reduction in curricular program offerings. Four directors (5.2%; $n = 4$) indicated a slight increase in curricular program offerings, and no band directors (0%; $n = 0$) indicated a significant increase in curricular program offerings. Figure 41 shows the results of band director feedback on the impact of the COVID-19 pandemic on their band program's curricular offerings between the 2019–2020 school year and the 2020–2021 school year.

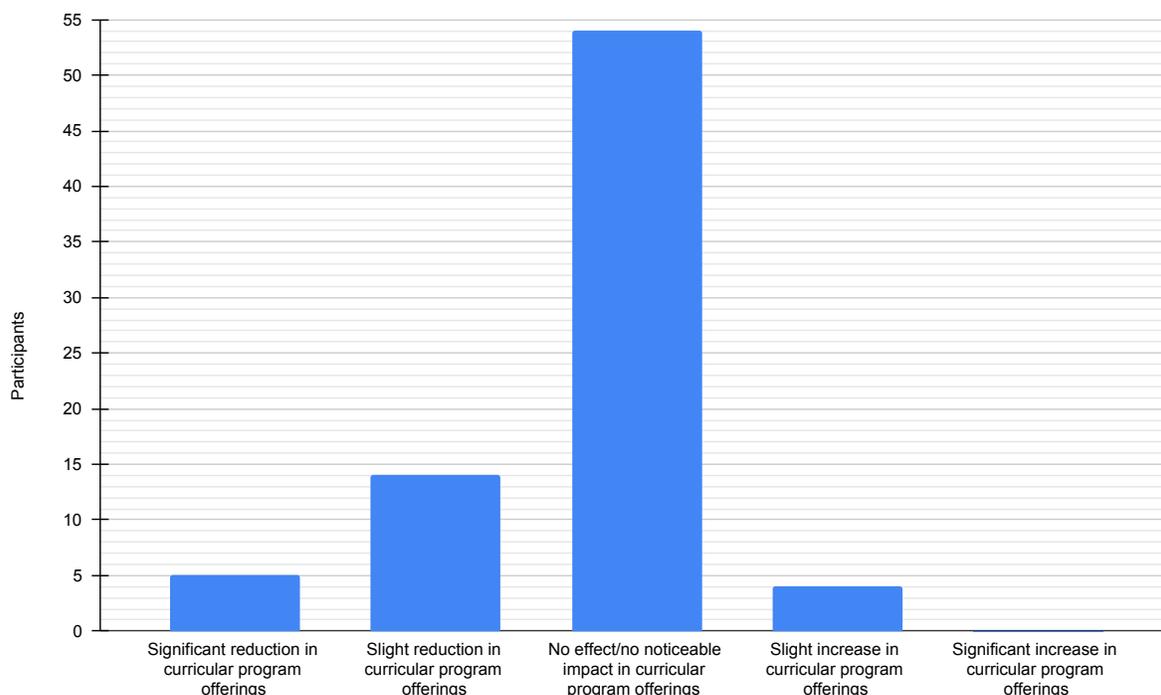


Figure 41. Impact the COVID-19 pandemic had on band program curricular offerings between the 2019–2020 and 2020–2021 school years.²⁴⁴

Survey Question 8: How Curricular Programs Were Affected

The next question allowed directors to be more specific about how their band program’s curricular programming was affected based on their responses to the previous question. Directors were given a five-point Likert-type scale with the response options of: program eliminated; program reduced/fewer sections or ensembles offered; no change in programming; existing program increased/more sections offered; new program, courses or ensembles added; and “other,” which asked participants to add their response if an appropriate option was not addressed in the question. Fifty-one directors (66.2%; $n = 51$) indicated that there was no change in programming. Twelve directors (15.6%; $n = 12$) indicated their program was reduced or fewer

²⁴⁴ Figure created by Matthew G. Marsolek.

sections or ensembles were offered. One director (1.3%, $n = 1$) indicated that their existing curricular programming increased or that more sections were offered, while three directors (3.9%, $n = 3$) indicated that new curricular programming, courses, or ensembles were added (see figure 42). Ten participants (13%, $n = 10$) selected “other” and qualified their response in a free written response area. Figure 42 shows the results of band director feedback on the impact of the COVID-19 pandemic on their band program’s curricular programming between the 2019–2020 school year and the 2020–2021 school year.

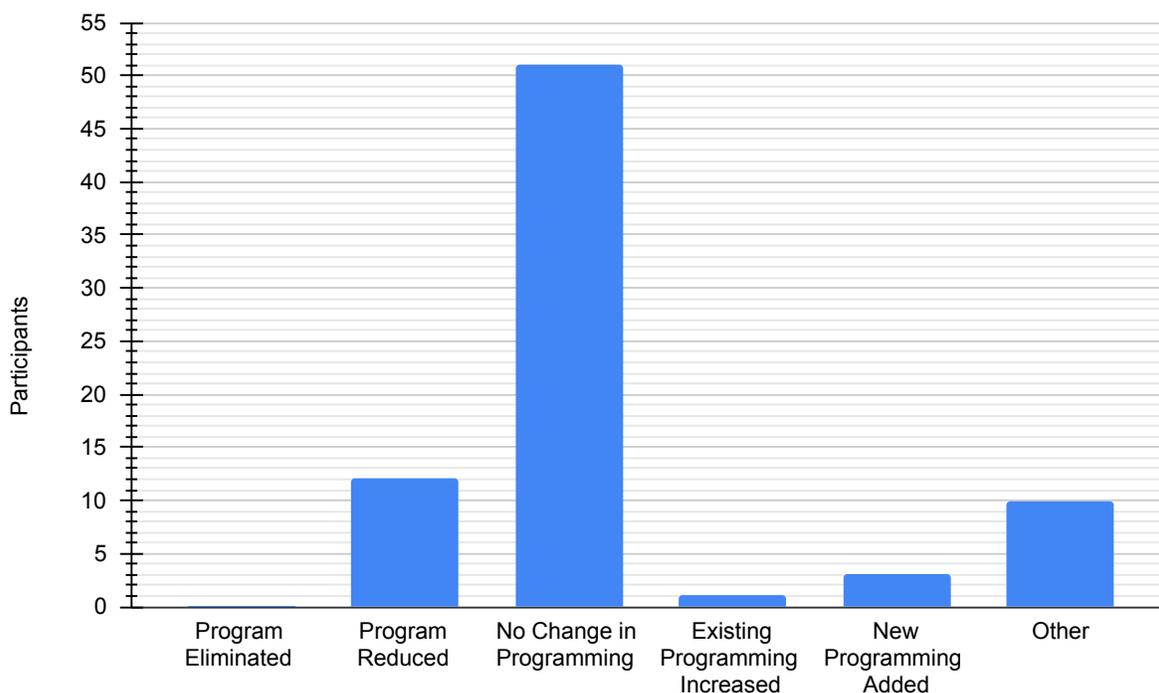


Figure 42. How curricular programming was affected between the 2019–2020 and 2020–2021 school year.²⁴⁵

²⁴⁵ Figure created by Matthew G. Marsolek.

Survey Question 9: Other Curricular Offerings Affected Open-Ended Response

Survey participants were given a free-response option to elaborate on how they believe their curricular program offerings were affected between the 2019–2020 and 2020–2021 school years and were not listed as an option within survey question eight. Ten directors (13%; $n = 10$) who indicated “other” in question eight, as well as two other participants (2.6%; $n = 2$) who clarified their responses, elaborated in the open-ended response area. The coding of the data revealed that a main theme in curricular offerings affected by the COVID-19 pandemic of a reduction or removal of band programming. Several directors reported that their ensemble sizes were reduced or that their rehearsal time was reduced. This included reduced sections, ensembles offered, and specific ensembles such as jazz band, parade band, pep band, and non-performance classes. Two directors also cited school schedule changes due to adjustments made for the COVID-19 pandemic as reasons for a reduction in contact time.

Band directors’ open-ended responses explaining how other curricular offerings in their band programs were affected are included below:

- “We had all of the ensembles that met in the school day, we had jazz band before school, but we did not have pep band during the 2020-2021 school year.”
- “No official course change, but substantial change in what the "band" classes included.”
- “Bands were split to reduce class sizes.”
- “We did not teach any of our non-performing classes...eg. History of Classical Music, AP Music Theory, etc.”
- “No jazz or parade band”

- “We haven’t had band or choir really at all since March 2020. We were online in distance learning the entirety of the 2020-2021 school year, and I just offered private Zoom lessons which worked as well as anything could have I guess. I also offered online music history and online songwriting, both of which I thought were not great. This year we’ve been back in school, and we had a mask mandate, so I just did mask-friendly music ensembles like percussion ensemble and string band and music history. No choir or large band. I did private lessons again all this year instead of large band but was able to get jazz band up and running again about halfway through the year.”
- “We did not do Jazz Band for the 2020-21 school year, but it was back this year.”
- “My band classes were decreased both in terms of time in the classroom as well as the number of rehearsals each week. My senior high and junior high band would normally meet for rehearsal five days a week for 48 minutes each day. For the 2020/21 school year, each ensemble met once a week for three hours (180 minutes) in order to accommodate a block schedule that reduced student movement.”
- “In addition to the HS Program being reduced/fewer sections or ensembles offered, the feeder program/elementary music program was eliminated.”
- “We changed from a 7-period day to a 5-period day and couldn't offer as much time with the band. Cut to my program because of schedule change.”
- “We developed a new model for 6th grade because we had to start them on their instruments one year later than normal. We kept the elementary model (each instrument group was a class period), and we are going to keep that model in the future. Our numbers from 5th to 6th are traditionally very large, and we found greater

success and our retention rate to be MUCH higher this year because of the smaller class sizes.”

- “The only thing that was eliminated for us was the MSHSL Band & Choir Contests, which we really missed, but I don't think it contributed greatly to any changes within our program.”

Survey Question 10: Impact on Band Extra-Curricular Offerings

Survey question ten asked directors what impact they believed the COVID-19 pandemic had on their band program’s extra-curricular offerings between the 2019–2020 school year and the 2020–2021 school year. Directors answered the question using a five-point Likert-type scale which included the options: significant reduction in extra-curricular offerings, slight reduction in extra-curricular offerings, no impact/no noticeable impact on extra-curricular offerings, slight increase in extra-curricular offerings, and significant increase in extra-curricular offerings. Twenty-seven directors (35.1%; $n = 27$) reported no effect or noticeable impact on extra-curricular program offerings. Twenty-one participants (27.3%; $n = 21$) indicated a slight reduction in curricular program offerings, and twenty-eight participants (36.4%; $n = 28$) indicated significant reduction in extra-curricular program offerings. None of the directors (0%; $n = 0$) indicated a slight increase in extra-curricular offerings, and one band director (1.3%, $n = 1$) indicated significant increase in extra-curricular offerings. Figure 43 shows the results of band director feedback on the impact of the COVID-19 pandemic on their band program’s extra-curricular offerings between the 2019–2020 school year and the 2020–2021 school year.

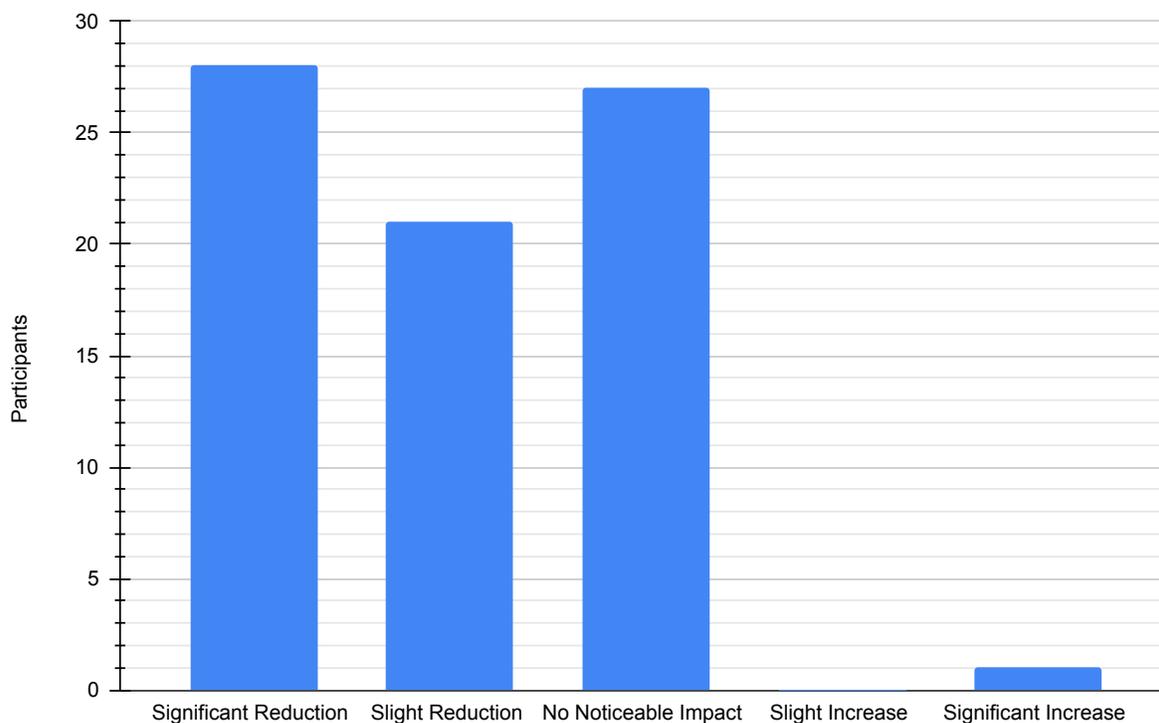


Figure 43. Impact of the COVID-19 pandemic had on extra-curricular offerings between the 2019–2020 and 2020–2021 school years.²⁴⁶

Survey Question 11: Impact on Common Band Extra-Curricular Programs

Participants were asked to respond to eight common extra-curricular band-related programs using a five-point Likert-type scale which included the following options: removed, reduced, no change/not applicable, increased, and added program. The band-related extra-curricular program options to which participants responded included jazz band, marching band, pep band, pit orchestra, solo/ensemble contest, music listening contest, drumline, percussion ensemble, and “other” with a free-response area for directors to qualify their response. The three areas most reported as being affected by the COVID-19 pandemic were solo/ensemble contests, with sixty-two (80.5%; $n = 62$) directors reporting a reduction or removal of the program, pep

band, with sixty-nine (76.6%; $n = 69$) directors reporting a reduction or removal of the program, and jazz band, with forty-one (53.2%; $n = 41$) directors reporting a reduction or removal of the program.

Jazz Band

Jazz band was the first extra-curricular program area measured. Thirty-five participants (45.5%; $n = 35$) indicated that there was no change to jazz band programming or that it did not apply to their specific situation. Fourteen directors (18.2%; $n = 14$) indicated that jazz band was removed from their program, and twenty-seven directors (35.1%; $n = 27$) indicated that their school's jazz band program was reduced due to the COVID-19 pandemic. One respondent (1.3%; $n = 1$) indicated an increase in jazz band programming, and none of the respondents (0%; $n = 0$) indicated added programming. Figure 44 shows the results of band director feedback on the impact of the COVID-19 pandemic on programming changes in the extra-curricular area of jazz band.

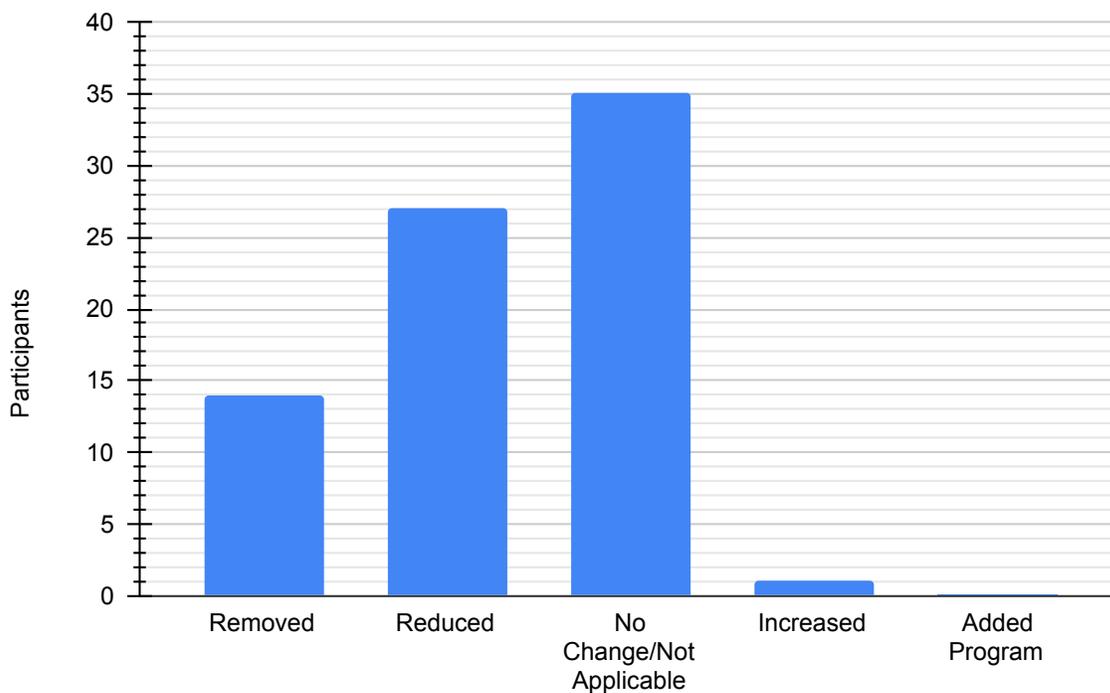


Figure 44. Jazz band programming change from the 2019–2020 school year to the 2020–2021 school year due to the COVID-19 pandemic.²⁴⁷

Marching Band

Marching band was the second extra-curricular program area addressed. Most participants (54.5%; $n = 42$) indicated that there was either no change in marching band programming or that this area of programming was not applicable to their school's band program due to the COVID-19 pandemic. Nineteen participants (24.7%; $n = 19$) indicated that marching band was removed from their band programming, and sixteen participants (20.8%; $n = 16$) indicated that their marching band programming was reduced due to the COVID-19 pandemic. None of the respondents indicated increased programming (0%; $n = 0$) or added marching band programming (0%; $n = 0$) in their school band programs. Figure 45 shows the results of band

²⁴⁷ Figure created by Matthew G. Marsolek.

director feedback on the impact of the COVID-19 pandemic on programming changes in the extra-curricular area of marching band.

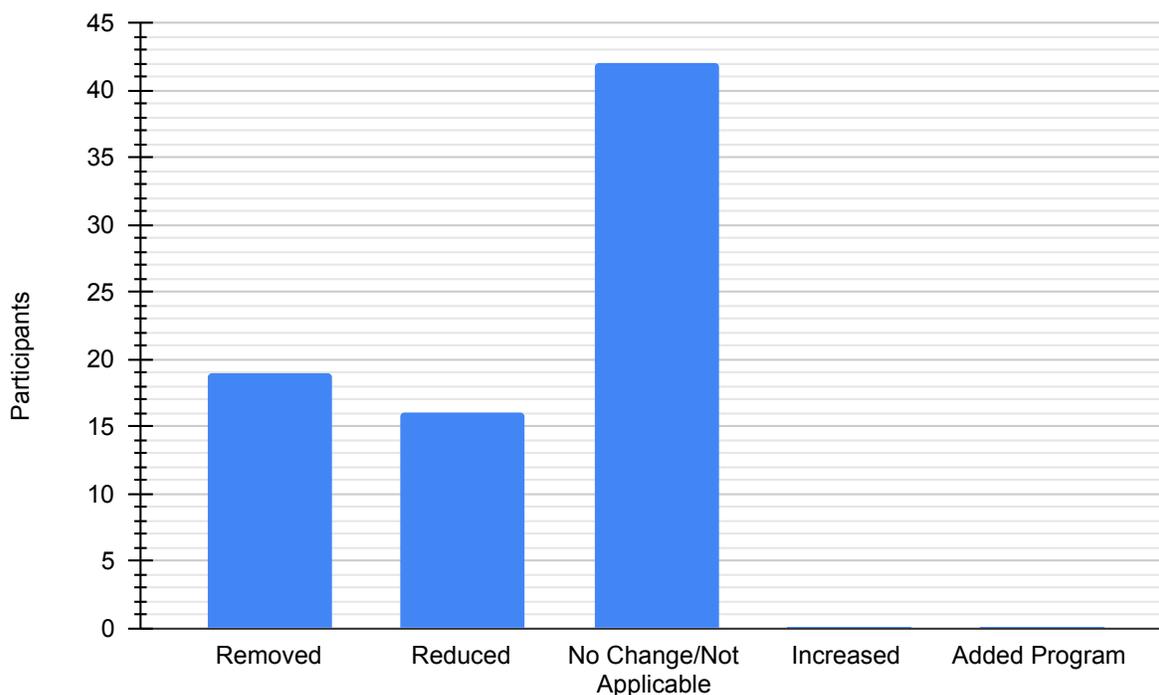


Figure 45. Marching band programming change from the 2019–2020 school year to the 2020–2021 school year due to the COVID-19 pandemic.²⁴⁸

Pep Band

Pep band was the third extra-curricular program area addressed. Most directors indicated that pep band programming was removed (58.4%; $n = 45$) or reduced (18.2%; $n = 14$) due to the COVID-19 pandemic. Eighteen participants (23.4%; $n = 18$) indicated that there was no change to pep band programming or that this area was not applicable to their band programs. None of the directors indicated that pep band programming increased (0%; $n = 0$) or was added (0%; $n =$

²⁴⁸ Figure created by Matthew G. Marsolek.

0) to their band programs Figure 46 shows the results of band director feedback on the impact of the COVID-19 pandemic on programming changes in the extra-curricular area of pep band.

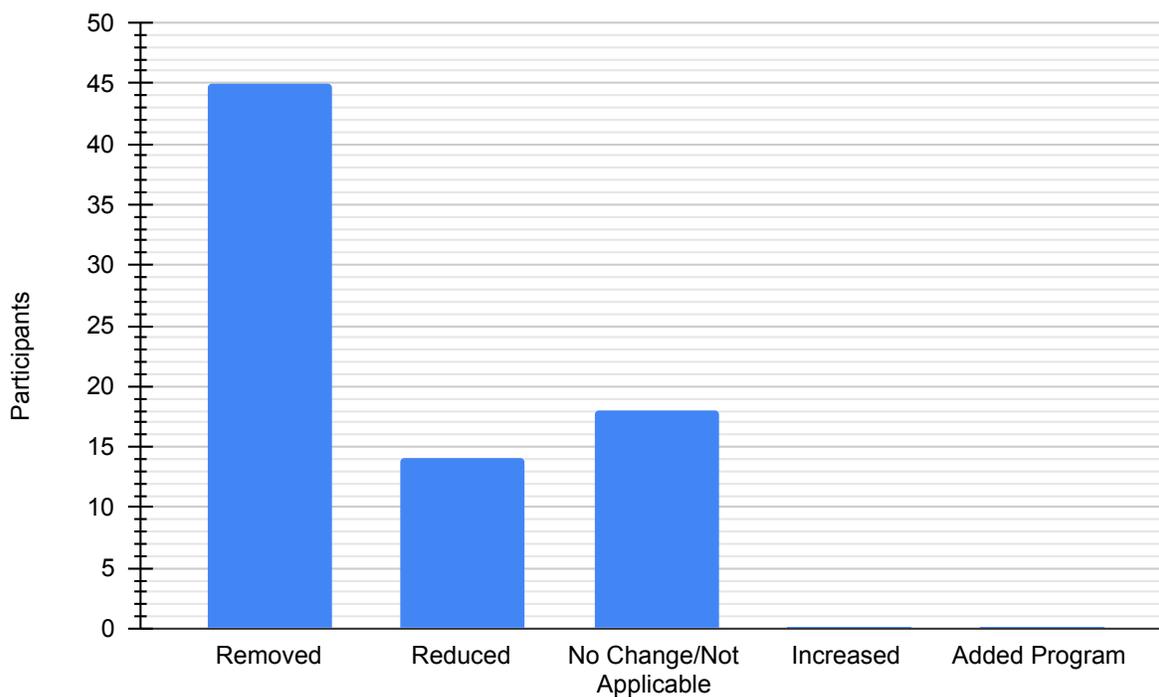


Figure 46. Pep band programming change from the 2019–2020 school year to the 2020–2021 school year due to the COVID-19 pandemic.²⁴⁹

Pit Orchestra

Pit orchestra was the fourth extra-curricular program area addressed. Forty-six respondents (59.7%; $n = 46$) indicated either no change in pit orchestra programming or that this area was not applicable to their situation. Twenty participants (26%; $n = 20$) indicated that pit orchestra programming was removed. Eleven participants (14.3%; $n = 11$) reported reduced pit orchestra programming due to the COVID-19 pandemic. None of the directors indicated that pit

²⁴⁹ Figure created by Matthew G. Marsolek.

orchestra programming increased (0%; $n = 0$) or was added (0%; $n = 0$) to their band programs.

Figure 47 shows the results of band director feedback on the impact of the COVID-19 pandemic on programming changes in the extra-curricular area of pit orchestra.

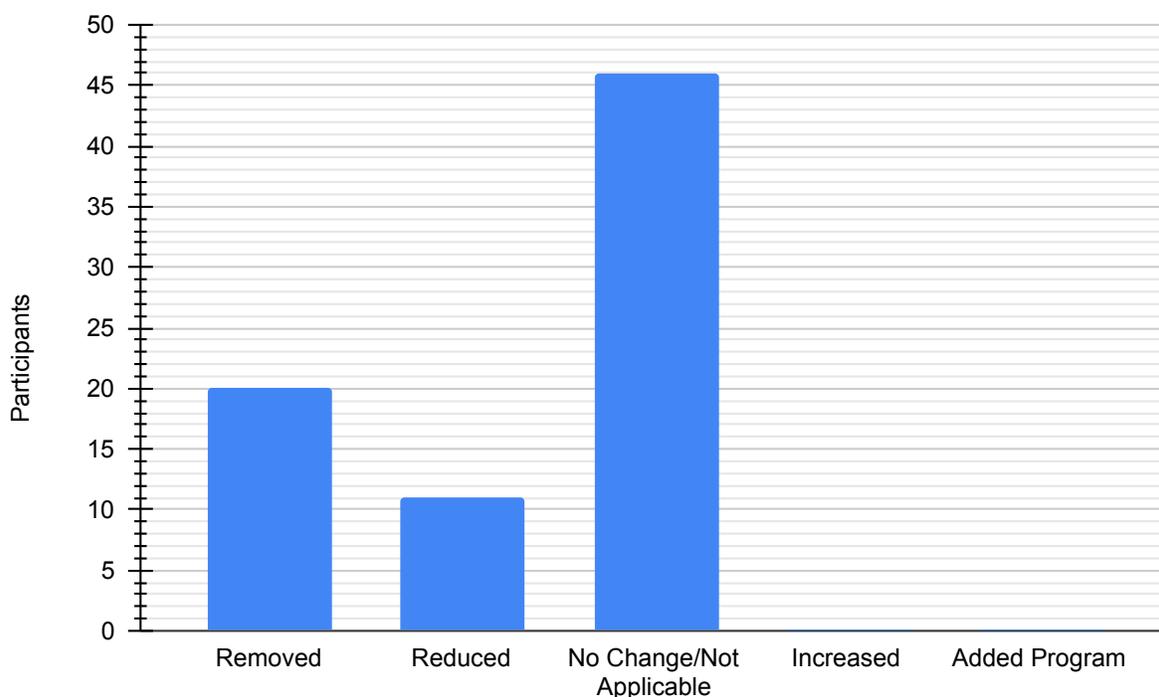


Figure 47. Pit orchestra programming change from the 2019–2020 school year to the 2020–2021 school year due to the COVID-19 pandemic.²⁵⁰

Solo and Ensemble Contest

Solo and ensemble contest was the fifth extra-curricular program area addressed. Most directors indicated that solo and ensemble contest programming was either removed (42.9%; $n = 33$) or reduced (37.7%; $n = 29$) in their band programs due to the COVID-19 pandemic. Fourteen participants (18.2%; $n = 14$) indicated either no change or that this extra-curricular programming

²⁵⁰ Figure created by Matthew G. Marsolek.

area was not applicable to their situation. One director (1.3%; $n = 1$) indicated increased solo and ensemble programming, and none (0%; $n = 0$) indicated added solo and ensemble programming. Figure 48 shows the results of band director feedback on the impact of the COVID-19 pandemic on programming changes in the extra-curricular area of solo and ensemble contests.

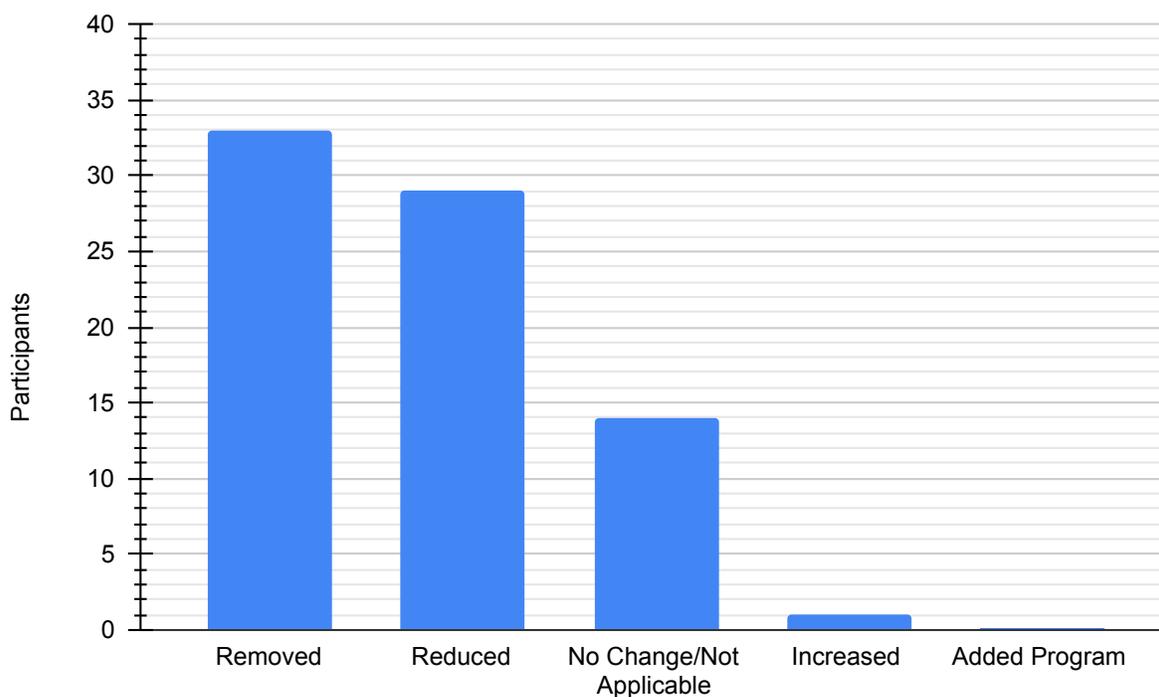


Figure 48. Solo and ensemble contest programming change from the 2019–2020 school year to the 2020–2021 school year due to the COVID-19 pandemic.²⁵¹

²⁵¹ Figure created by Matthew G. Marsolek.

Music Listening Contest

Music listening contest was the sixth extra-curricular program area addressed. Most directors (79.2%; $n = 61$) indicated that there was no change or that this programming area was not applicable to their specific programming situation. Twelve participants (15.6%; $n = 12$) reported that music listening contest programming was removed. Four participants (5.2%; $n = 4$) reported reduced programming in this area due to the COVID-19 pandemic. None of the participants indicated either increased (0%; $n = 0$) or added (0%; $n = 0$) programming in the area of music listening contest. Figure 49 shows the results of band director feedback on the impact of the COVID-19 pandemic on programming changes in the extra-curricular area of music listening contest.

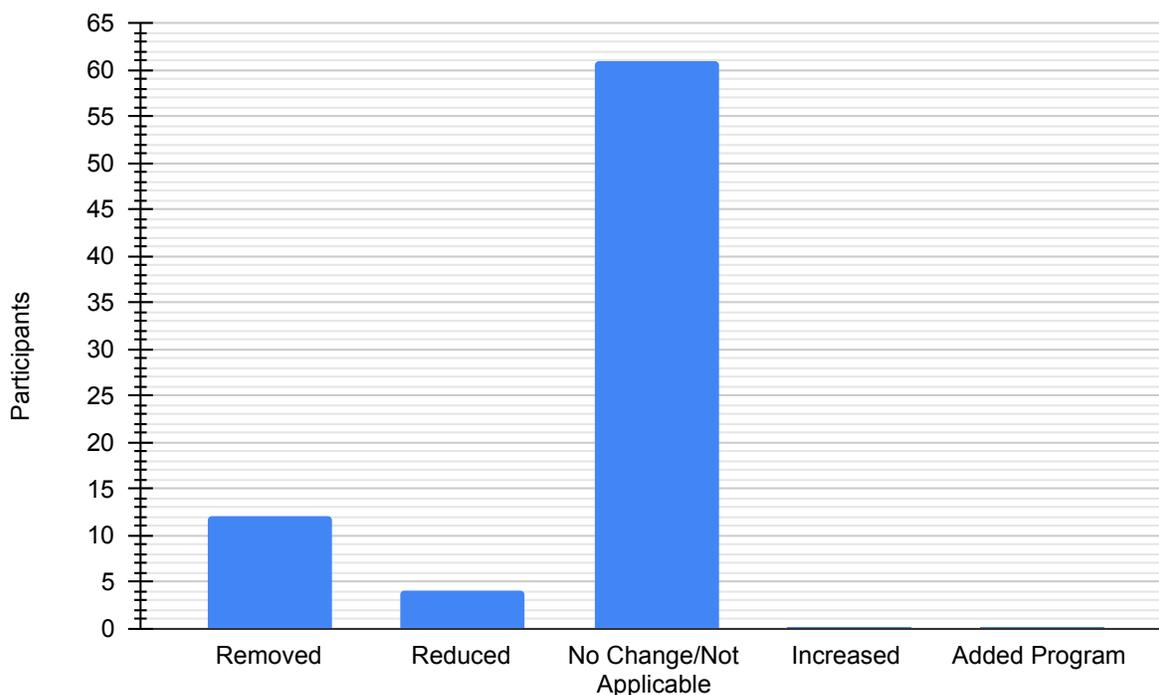


Figure 49. Music listening contest programming change from the 2019–2020 school year to the 2020–2021 school year due to the COVID-19 pandemic.²⁵²

²⁵² Figure created by Matthew G. Marsolek.

Drumline

Drumline was the seventh extra-curricular program area addressed. Most directors (70.1%; $n = 54$) reported that there was no change to programming or that this programming area was not applicable to their specific programming situation. Twelve participants (15.6%; $n = 12$) reported that drumline programming was removed, and ten participants (13%; $n = 10$) reported that drumline programming was reduced due to the COVID-19 pandemic. One participant (1.3%; $n = 1$) reported increased drumline programming, and none of the participants (0%; $n = 0$) reported added programming in the area of drumline. Figure 50 shows the results of band director feedback on the impact of the COVID-19 pandemic on programming changes in the extra-curricular area of drumline.

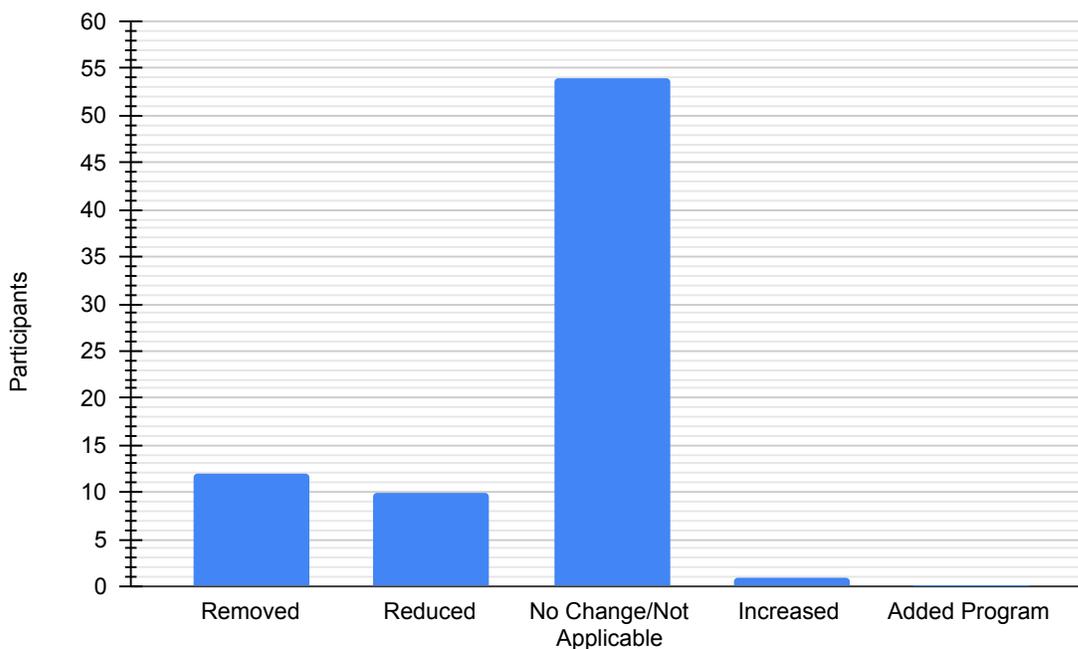


Figure 50. Drumline programming change from the 2019–2020 school year to the 2020–2021 school year due to the COVID-19 pandemic.²⁵³

²⁵³ Figure created by Matthew G. Marsolek.

Percussion Ensemble

Percussion ensemble was the eighth extra-curricular program area addressed. Most directors (81.8%; $n = 63$) reported either no change in percussion ensemble programming or that this programming area was not applicable to their specific programming situation. Six directors (7.8%; $n = 6$) reported removal of percussion ensemble programming, and four (5.2%; $n = 4$) reported reduction in percussion ensemble programming due to the COVID-19 pandemic. Two directors (2.6%; $n = 2$) reported increased percussion ensemble programming, and two directors (2.6%; $n = 2$) reported added programming in this area. Figure 51 shows the results of band director feedback on the impact of the COVID-19 pandemic on programming changes in the extra-curricular area of percussion ensemble.

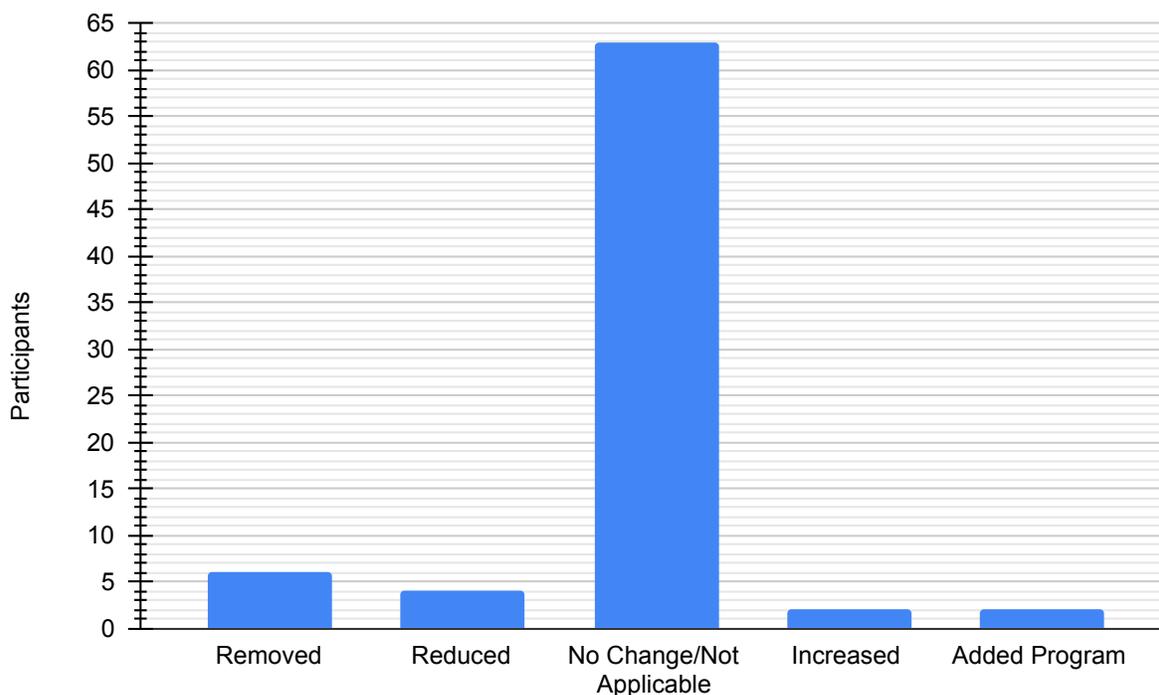


Figure 51. Percussion ensemble programming change from the 2019–2020 school year to the 2020–2021 school year due to the COVID-19 pandemic.²⁵⁴

²⁵⁴ Figure created by Matthew G. Marsolek.

Other Extra-Curricular Programming Areas

Directors also had the option to signify whether other extra-curricular programming areas had been affected between the 2019–2020 and 2020–2021 school year due to the COVID-19 pandemic that were not addressed in the previous eight options in this survey. Most directors (79.2%; $n = 61$) indicated that this was not applicable or there was no change to other extra-curricular areas. Ten directors (13%; $n = 10$) indicated that other programming was removed. Three directors (3.9%; $n = 3$) indicated that other programming was reduced due to the COVID-19 pandemic. One director (1.3%; $n = 1$) reported an increase in other programming, and two directors (2.6%; $n = 2$) indicated added programming. Directors were encouraged to qualify their answers to this area of other programming with a free-response section. Figure 52 shows the results of band director feedback on the impact of the COVID-19 pandemic on programming changes in the extra-curricular area of other programming changes.

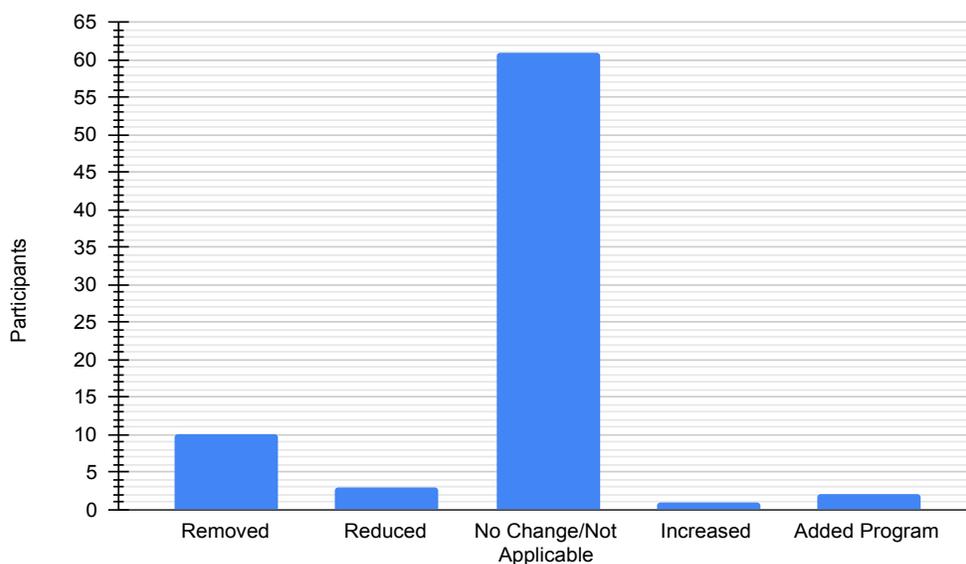


Figure 52. Other programming changes from the 2019–2020 school year to the 2020–2021 school year due to the COVID-19 pandemic.²⁵⁵

²⁵⁵ Figure created by Matthew G. Marsolek.

Survey Question 12: Other Extra-Curricular Programming

Survey participants could respond to a free-response option to elaborate on how they believe their extra-curricular program offerings were affected between the 2019–2020 and 2020–2021 school years and were not adequately outlined in the survey response option within question eleven. Fifteen participants (19.5%; $n = 15$) qualified their answers in the open-ended free-response section. The main themes that arose through the coding process were the reduction or removal of extra-curricular programming and no change. Many directors indicated the loss or reduction of extra-curricular programming, including large group contest, individual lesson time, “limited extra-curriculars,” and online drumline. A few directors indicated no change in extra-curricular programming during this time.

Band directors’ open-ended responses explaining how other extra-curricular offerings in their band programs were affected are included below:

- Data notably out of date as all of these things returned for 21-22 (some fully, some with reduced participation).
- Drumline went from in person to virtual for the 2020-2021 season.
- Honor Bands/Festivals.
- Large Ensemble Contest did not happen at all, either.
- Large group contests were also removed from the schedule and were harder to replace with something “in house,” so basically were eliminated for 2 years.
- Large group music contest was not an option for us in 20-21.
- Limited extra-curricular activities: Jazz band, orchestra winds, solo/ensemble contest and pep band.
- My individual lesson time was cut during Covid.

- Other ensembles, such as chamber groups (woodwind choir, brass choir, etc) remained unchanged.
- Our enrollment numbers did increase in our instrumental program during this time.
- Some of these ensembles did not happen in 19-20 (jazz band, pit orchestra) but returned in 20-21.
- String Orchestra.
- The ‘removed’ option should not have been chosen, just merely left blank as we do not have those activities. My apologies.
- We added color guard. Easiest 6 foot + spacing needed!
- We also added a string band and dance class. I also added a “beginning wind ensemble” class to try and get some new wind players started.
- We had the biggest issues with the first year – 19-20. Last year 20-21 we got back to normal for most of the year as we live in an area that tends to think Covid is a myth.

Survey Part 3: Fulltime Teacher Equivalent Findings

The third and final part of the survey asked participants to report on band director FTE. Directors answered an initial question about whether their high school band programs experienced any changes in band director FTE between the 2019–2020 and 2020–2021 school years using a three-point Likert-type scale which asked if there was a reduction in band director FTE, no change in band director FTE, or increase in band director FTE. The second two follow-up questions ask what the specific 9–12th-grade band director FTE was during the 2019–2020 school year and the 2020–2021 school year. The final question in this section asked the directors what they believe was the biggest factor in their school’s band director FTE change. Directors were given a list of eleven possible factors that may have contributed to the FTE change and a

free-response option to qualify their answers. These eleven factors included: there was no change in FTE, reduced band program enrollment due to the COVID-19 pandemic, reduced band program enrollment unrelated to the COVID-19 pandemic, reduced course offerings or elimination of ensembles, change in school day schedule, declining school enrollment, added course offerings/ensembles, growing school enrollment, school consolidation, increased band program enrollment, and increase due to adding online class offerings.

Survey Question 13: Band Director FTE Change

The first question in this section asked participants whether 9–12 grade band director FTE was reduced, increased, or if there was no change between the 2019–2020 and 2020–2021 school years. Seventy directors (91%; $n = 70$) indicated no change in band director FTE for this time frame. Seven directors (9%; $n = 7$) indicated a reduction in band director FTE between the 2019–2020 and 2020–2021 school years. None of the participants (0%; $n = 0$) reported increased band director FTE between the 2019–2020 and 2020–2021 school years. Figure 52 shows the results of participant feedback on the impact of the COVID-19 pandemic on band director FTE.

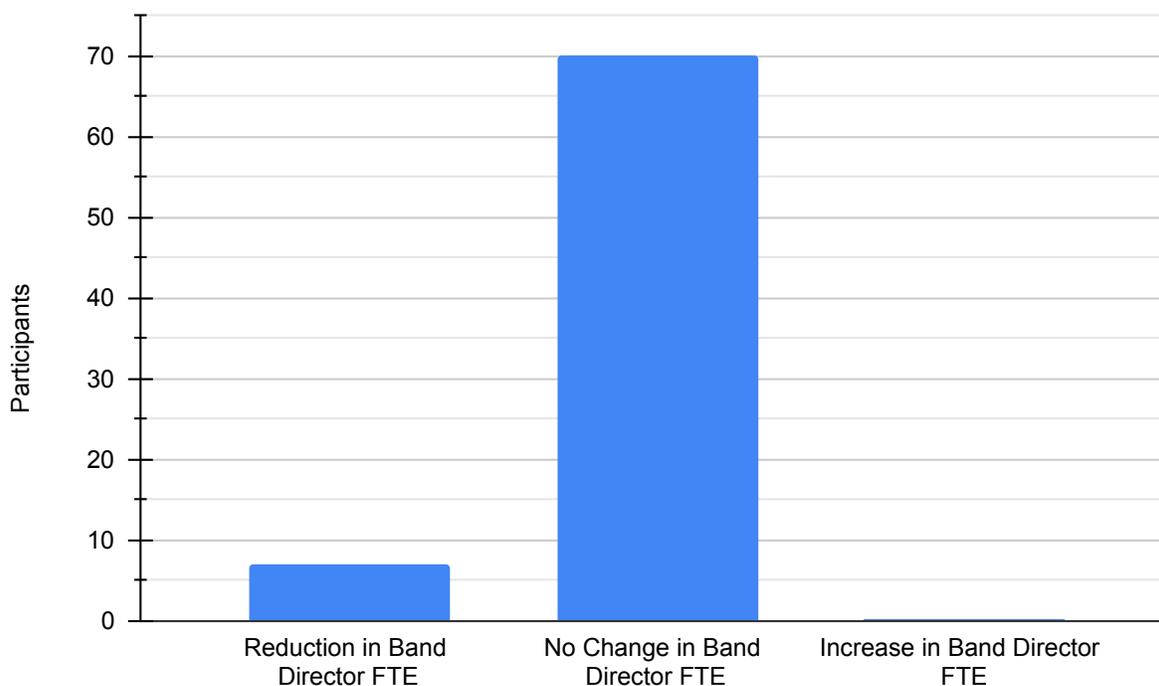


Figure 53. Band directors reporting FTE change between the 2019–2020 and 2020–2021 school years.²⁵⁶

Survey Questions 14 and 15: FTE Reduction

The next two questions asked directors for their specific FTE during the 2019–2020 and the 2020–2021 school years. The seven directors ($n = 7$) who indicated a reduction in the previous question are included in table 19, along with a director ($n = 1$) who did not indicate a change in FTE in the previous question but did so (see last line of table 19). Table 19 shows the specific FTE reductions between the 209–2020 and 2020–2021 school years reported by band directors.

²⁵⁶ Figure created by Matthew G. Marsolek.

Table 19. Band directors reporting FTE reduction between the 2019–2020 and 2020–2021 school years²⁵⁷

2019–2020	2020–2021
2.6	2
1.5	1
1.4	1.2
1.5	1.25
4.0 FTE Band	3.5 FTE Band
1.2	1
1	0.6
In 2019-2020, I taught 5-12 vocal and instrumental music, so 9-12 Band was maybe 0.3	In 2020-2021, I taught all of the music at my school, K-12 vocal and instrumental, so 9-12 Band was probably about 0.2

Survey Question 16: Factors in FTE Change

Survey question sixteen asked directors to choose what they believed was the biggest factor in their school’s band director FTE change. Of the eleven options, none of the directors (0%; $n = 0$) indicated that an FTE change was due to reduced band program enrollment unrelated to the COVID-19 pandemic, reduced course offerings or elimination of ensembles, growing school enrollment, school consolidation, or increase due to adding online class offerings. Sixty-seven directors (87%; $n = 67$) reported no change in their school’s band director FTE. There were ten remaining directors (13%; $n = 10$) that indicated a factor for FTE change. Five of these directors (6.5%; $n = 5$) indicated that the biggest factor in the reduction of band director FTE between the 2019–2020 and 2020–2021 school years was reduced band program enrollment due

²⁵⁷ Table created by Matthew G. Marsolek.

to the COVID-19 pandemic. Two participants (2.6%, $n = 2$) indicated declining school enrollment as the biggest factor in reduced band director FTE. One director each reported that change in the school day schedule (1.3%; $n = 1$), added course offerings and/or ensembles (1.3%; $n = 1$), and increased band program enrollment (1.3%; $n = 1$) were the biggest factors in the change in band director FTE between the 2019–2020 and 2020–2021 school years. Figure 53 shows the results of band director feedback on what they believed was the biggest factor in FTE change between the 2019–2020 and 2020–2021 school years.

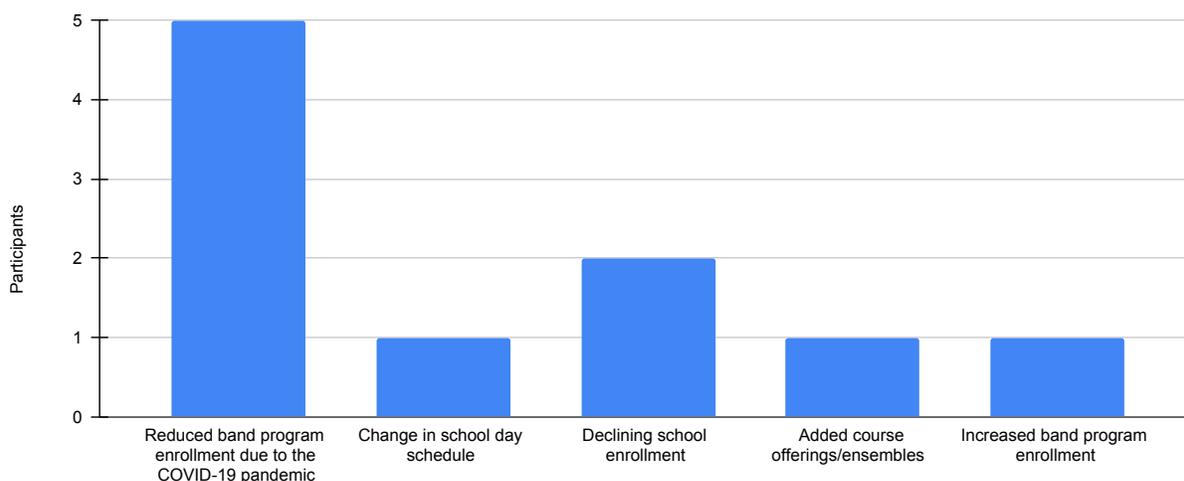


Figure 54. Biggest factor in band director FTE change between the 2019–2020 and 2020–2021 school years.²⁵⁸

It is notable that three of these directors did not indicate a change in FTE in the first question about band director FTE for different reasons. The first indicated no change in FTE, showed no FTE change, and explained that this was due to increased band program enrollment. The second director qualified that FTE had increased due to added sections of beginning band

²⁵⁸ Figure created by Matthew G. Marsolek.

and selected added course offerings. The final director was the individual who indicated no change in band director FTE, showed a change in FTE (last line of table 19), and indicated declining school enrollment as the factor.

Two directors (2.6%; $n = 2$) qualified their answers to the previous question in the free-response section. The theme that emerged was the reduction or removal of programming. One of the two directors indicated an increase in FTE for a non-band music course, with the prediction that an enrollment reduction may lead to the loss of programming: “Music department added .2 FTE with a music production class. Band program unaffected at this point, but significant reduction in enrollment may soon lead to the cancellation of an ensemble and our lessons program.” The second director, who indicated a decrease in band director FTE due to a change in the school day schedule, reported: “Budget Reduction in school system, poor choice by admin to reduce music. Numbers didn't warrant change.”

Summary of Findings

The data in this mixed methods study were gathered in two parts to study the possible effects of the COVID-19 pandemic on Minnesota band programs. In the first part of the study, data requested from the Minnesota Department of Education was studied and analyzed for trends in Minnesota high school band program enrollment based on the onset of the COVID-19 pandemic in March of 2020. The second part of the study consisted of a voluntary survey completed by Minnesota high school band directors based on their lived experiences with the COVID-19 pandemic and their band programs.

Data observed in the first part of the study analyzed high school band enrollment from the fall of 2015 to the fall of 2021. They showed a general decline in enrollment over that time period and a decrease in band program enrollment from the fall of 2019 to the fall of 2020 and

again from the fall of 2020 to the fall of 2021, which was the focus of the study. Participation was measured using the percentage of students enrolled in band of the entire school population. Overall, statewide enrollment decreased from 11.43% in the fall of 2019, to 11.01% in the fall of 2020, to 10.24% in the fall of 2021. Trends in Minnesota metro and non-metro were also measured, showing a decline in band program enrollment from before the onset of the COVID-19 pandemic. Metro band program enrollment dropped from 8.42% of students participating in the fall of 2019 to 8.10% in the fall of 2020 to 7.34% participation in the fall of 2021. Non-metro band program enrollment dropped from 14.86% in the fall of 2019 to 14.31% in 2020 to 13.45% in the fall of 2021.

The first part of the project also looked at comparisons between each grade level and graduation year cohorts. A decline was observed in all grade levels over the period of 2019—2021, except for eleventh-grade non-metro band enrollment, which showed a 0.14% increase between the falls of 2019 and 2020, and then declined between the falls of 2020 and 2021. Graduation cohorts also showed a decline. The class of 2019 showed a decrease of 7.01% from the fall of ninth grade to the fall of twelfth grade. The class of 2020 decrease by 7.08% from ninth grade to twelfth grade (senior year measured pre-pandemic in the fall of 2019). The class of 2021 showed a decrease of 7.82% from the fall of ninth grade to the fall of 2020 (first post-pandemic onset measurement). The class of 2022 showed a reduction of 7.07% from the fall of ninth grade to the fall of twelfth grade.

The second part of the study surveyed Minnesota high school band directors about their perceptions and observations about enrollment, programming, and band director FTE during the first year of the COVID-19 pandemic. Of the seventy-seven directors surveyed, sixty reported a decrease in enrollment due to the COVID-19 pandemic. The directors indicated that the three

factors that substantially affected decreased enrollment in their band programs were online/remote learning, a decrease in live rehearsal time, and diminished social interaction among ensemble members. Most band directors, fifty-four of seventy-seven (70.1%; $n = 54$), indicated no noticeable effect (reduction or increase) by the COVID-19 pandemic on curricular program offerings between the 2019—2020 and 2020—2021 school years. However, forty-nine (63.6%; $n = 49$) indicated at least some reduction in extra-curricular offerings during this period. The three extra-curricular areas most reported as being affected by the COVID-19 pandemic were solo/ensemble contests, with sixty-two directors (80.5%; $n = 62$) saying a reduction or removal of the program, pep band with fifty-nine directors (76.6%; $n = 59$) reporting a reduction or removal of the program, and jazz band with forty-one directors (53.2%; $n = 41$) reporting a reduction or removal of the program. When surveyed about band director staffing, seventy of the seventy-seven (90.9%; $n = 70$) reported no decrease in band director FTE between the 2019–2020 and 2020–2021 school years, and seven directors (9.1%; $n = 7$) reported a reduction in FTE for the same time. The coding of open-ended questions relating to the closed questions asked in the quantitative parts of the survey revealed themes of relationships, distance learning, no change, and the reduction or removal of programming.

Chapter Five: Conclusions

Introduction

In the spring of 2020, the COVID-19 pandemic began in the United States, affecting all ways of life, including music education. The authorities closed schools, forcing education to move online for a time—the 2020–2021 school year offered multiple education models for Minnesota students, including online, hybrid, and in-person. Many schools and school bands that were able to meet in person did so with additional safety measures, including physical distancing, masks and bell covers, reduced contact and rehearsal time, fewer members in rehearsal spaces, changed rehearsal space to outdoors or a larger room such as a gymnasium, and additional sanitation requirements. Typical band staples, such as concerts, performance travel, and extra-curricular ensembles, were adjusted, reduced, or canceled. Multiple non-academic band publications reported that directors feared for their programs' future due to declining enrollment related to the COVID-19 pandemic. The researcher created this study in response to these events.

Summary of Study

This convergent parallel mixed methods study was designed in two parts: a quantitative analysis of high school band enrollment data for the state of Minnesota, and a quantitative and qualitative survey of Minnesota high school band directors inquiring about their observations and lived experiences within their band programs during the COVID-19 pandemic. For the first part of the study, the researcher requested the Minnesota Department of Education for school and band enrollment data from 2015–2021. Of Minnesota's 479 public secondary schools housing high school students, complete datasets were available for 167 schools ($N = 167$) representing

139 state school districts. The MDE divided the data into subsets that included entire school and class populations, individual grade populations, and metro and non-metro populations. The researcher recorded observational data incorporating these subsets and graduation year cohorts.

The second part of the study anonymously surveyed seventy-seven ($N = 77$) Minnesota high school band directors about their perceptions concerning how the COVID-19 pandemic may have affected their band programs. The survey was divided into three sections. The first section focused on the effect, if any, the COVID-19 pandemic had on band program enrollment. The second section focused on what effect, if any, the COVID-19 pandemic had on band curricular and extra-curricular programming. The third section focused on what effect, if any, the COVID-19 pandemic had on band director FTE. The survey was created using a Google form and distributed via email and social media to Minnesota band directors.

Summary of Findings and Prior Research

In the first part of the study, the data show an overall decrease in high school band enrollment in Minnesota based on measurements taken in the fall before the pandemic began in 2019 to the fall of 2020 immediately after the pandemic began, and again between the fall of 2020 and the fall of 2021 after a full year of following COVID-19 protocols in Minnesota schools. The survey of Minnesota high school band directors also showed that sixty of seventy-seven (77.9%; $n = 60$) reported a perceived decrease in enrollment due to the COVID-19 pandemic.

The director survey is informative concerning the observed statistical enrollment data from the first part of the study. The findings from the director survey imply that the onset of the COVID-19 pandemic corresponded to a decrease in band program enrollment, findings affirmed by sixty of the seventy-seven band directors (67.9%; $n = 60$) who reported that their programs

experienced a decline in enrollment between the 2019–2020 and 2020–2021 school year due to the COVID-19 pandemic.

The survey showed that Minnesota band directors perceived the factors that had the most substantial effect on enrollment decline due to the COVID-19 pandemic were online/remote learning, a decrease in live rehearsal time, and decreased social interaction among ensemble members. While Hash highlights the benefits of online/distance learning for some applications, it is revealed through directors' lived experiences of teaching band online that the negative aspects outweighed the positive.²⁵⁹ From the literature, one can surmise that contributing factors may include "audio quality and delay," equitable technology access, and student attendance.²⁶⁰ The open-ended qualitative responses collected through the survey also identified distance learning and relationships as main themes concerning the effects of the COVID-19 pandemic on band programs. One director indicated that some of these factors are interconnected, stating, "The music and social interaction is what was lost during online band, it was tragic!"

The director survey also indicated that the reduction in rehearsal time created by the online format and the additional guidelines set by the Minnesota Department of Health affecting all in-person rehearsal experiences was a motivating factor for student attrition.²⁶¹ While Ng suggests that "an important difference between continuing and discontinuing students was their reported time on practice," one might also conclude that the music proficiency that helps students continue in band was affected by less rehearsal.²⁶² Considering grade orientation, a

²⁵⁹ Hash, "Remote Learning in School Bands," 382–383.

²⁶⁰ *Ibid.*, 383.

²⁶¹ "Music Activities and Performances," Minnesota Department of Health, 4–5.

²⁶² Ng, "Australian Primary Students' Motivation," 287.

component of “Achievement Goal Theory,” which is the model prevalent in most classrooms and focuses on external motivators, it is possible that once other factors are removed from the classroom environment, those who are not “high-performing” students already lose motivation and interest in band.²⁶³ The main theme of reduced or removed programming was also identified in the qualitative data collected by the survey, which supports this factor.

Finally, a decrease in social interaction among members of the ensembles was identified by Minnesota band directors as one of the top three factors contributing to enrollment decline due to the COVID-19 pandemic. This is not surprising as it is well-researched that the community created within an ensemble benefits students. While it is documented that “being involved in music provides [students] with a sense of belonging,” it is logical to assume that without this sense of belonging, students no longer felt a connection or motivation to continue in band.²⁶⁴ Other benefits that students would have experienced, such as peer-to-peer support and mentoring, may have been lost through this decreased social interaction.²⁶⁵ The qualitative data from the survey also supports this factor, as the theme of relationships arose in the coding of open-ended questions within the director survey. Another Minnesota band director surveyed connected these elements explaining, “Meeting together and having that connection with others, and hearing the progress that is made in live rehearsals is very motivating for all students, and when that was taken away, many students found it hard to continue working and doing band.”

²⁶³ Green and Hale, “Fostering a Lifelong Love of Music,” 46.

²⁶⁴ Campbell et al., “Adolescents’ Expressed Meanings of Music,” 230.

²⁶⁵ Jackson, “The Effect of an Attrition Intervention Program,” 39.

Limitations

There are limitations to consider when reviewing the results of this mixed methods study. First, the datasets provided by Minnesota were incomplete, as not every school or district reported their enrollment data to the state each year over the study's timeframe. Two notable districts missing from the dataset were Minneapolis Public Schools and St. Paul Public Schools, two of the largest school districts in the state. The study included other large metro school districts in Minnesota. Thus, the research employed an excellent representation and balance of school districts to represent the state.

As with any study about a phenomenon as widespread as the COVID-19 pandemic, it is impossible to isolate cause and effect or even argue for a correlation between the sole variable of the COVID-19 pandemic and high school band enrollment. This argument is one of the primary reasons this study was undertaken—to begin collecting data and lived experiences for other scholars to build upon. While this study attempts to describe the educational conditions of the COVID-19 pandemic, it may not do full justice to the experience—the COVID-19 pandemic was an all-encompassing event that affected every aspect of life.

Another limitation was the study's design. The design of this study is to make observations of collected data, not a comprehensive statistical analysis. It may be possible that the application of statistical tools measuring correlation and statistical significance may have brought more validity to the overall notion that a decrease in enrollment in Minnesota high school band programs was possibly connected to the onset of the COVID-19 pandemic, which began in the spring of 2020.

Another limitation was the director survey, which was distributed and taken online without a guaranteed confirmation that those taking the survey were certified band directors.

Directors were required to self-select whether or not they fit the survey criteria. The survey was distributed directly to high school band director email addresses and posted in a private Facebook group, Minnesota Band Director Group, to limit this liability. Also, the survey administration occurred in the spring of 2022, in the school year following the 2020–2021 school, which was the focus of the study. It is possible that some responses were affected by fading memory of participants. The director survey also could have provided more detailed information if it had included an identifier that allowed directors to share whether their school was within the seven-county metro area or outside of the seven-county metro area.

A further limitation of the study is the vastly different realities of school district responses to COVID-19 safety protocols throughout Minnesota during the pandemic. During the 2020–2021 school year, some schools were forced to go into distance learning based on how many positive cases were reported in their county or school district. Positive cases were higher in more populated areas like the seven-county metro area than outstate Minnesota. This difference could have led to more band students experiencing online band in some areas than other students. Additionally, as the response to the COVID-19 pandemic became a politically divisive issue, rural areas and school boards (more than urban and suburban areas) tended to reject and overrule state mandates for COVID-19 precautions. Survey participants reported that some schools in Minnesota “pretended that COVID didn’t exist” and functioned as though times were normally. One survey respondent explained, “COVID didn't have much of an effect in my small, rural district. We ran the 2020-2021 school year as normally as possible. This school year [2021–2022] is almost as normal as the 2019-2020 school year before the shutdown.” With this in mind, it was impossible to share the study’s data and assume that every school and band program had the same experience during the COVID-19 pandemic.

Finally, comparing these results to past studies is challenging without much pre-existing data or studies on band programs and the COVID-19 pandemic. Additionally, because the phenomenon of the COVID-19 pandemic was so unique, there were few existing studies on which to base the design for this study. Hopefully, the design of this study and the information gathered within can be helpful to future scholars in similar pursuits.

Recommendations for Future Study

While this study focused on high school band programs, future studies should include middle and beginning-level band programs. The researcher surmises that older students who have more musical proficiency, positive social experiences, and connections with teachers within an ensemble setting are more likely to stay enrolled in band despite the difficulty of the COVID-19 pandemic and that middle-level students who do not have these assets may not have felt the connection or staying power and dropped out at higher numbers. Jackson posits that middle school, “particularly those in grades six and eight,” is an important time for teachers to focus on retaining students already in their band programs.²⁶⁶ The middle level is a crucial age for student retention. Many students in grades 5–8, when the COVID-19 pandemic began, who later discontinued band, would likely have continued without the pandemic, and programs would have seen smaller decreases in participation and enrollment.

This study observed high school band participation focusing on graduation class cohorts. It would be informative for future projects to study band participation in class cohorts beginning when students start an instrument in band, which may be as early as elementary school. This type of research could more deeply inform practitioners about attrition rates for band students, both

²⁶⁶ Jackson, "The Effect of an Attrition," 156.

connected to and independent of the COVID-19 pandemic. Looking for patterns in attrition rates may help music educators understand and prevent such attrition from occurring.

The scope of this project focuses on high school band. It would be prudent to run similar studies with orchestra, choir, and other music classes to see if similar results are obtained. Additionally, expanding this study from a focus on one state (Minnesota) to a national and international scale would bring a greater understanding of how the COVID-19 pandemic may have affected music education overall. The focus of the data collection in part 1 of this study was limited to public and charter schools in Minnesota. It did not include private schools (private schools do not report this data to the Minnesota Department of Education). During the COVID-19 pandemic, public schools saw a decrease in overall enrollment, while private schools saw an increase.²⁶⁷ Studying how music programs fared in private schools during the COVID-19 pandemic would be informative.

There is also one unexpected data point that emerged as a result of observing the statistical school band enrollment data provided by the state of Minnesota. The trend observed was the disparity in band enrollment between metro and non-metro schools. In all cases where metro band enrollment data was observed alongside non-metro band enrollment data, the metro schools noticeably had a smaller percentage of the entire school population participating in the band program. This difference was especially apparent in grades eleven and twelve, where the non-metro schools, in most observed instances, had twice as many students participating in band as did metro schools. This was also the case when studying the graduation year cohorts. This finding warrants further study in two respects. The first respect is whether this data can be

²⁶⁷ Ashleigh Norris, "2021-22 School Year Enrollment Data Released," Minnesota Department of Education, February 25, 2022, accessed April 2, 2023, <https://content.govdelivery.com/accounts/MNMDE/bulletins/30c49fd>.

reproduced in places other than Minnesota. The second is to study possibilities leading to a stark difference between metro and non-metro schools.

Implications for Practice

The results of this study have multiple implications for practical application. The first and most apparent is the decrease in band enrollment following the onset of the COVID-19 pandemic and the possible short and long-term effects that this may have on music education. While only seven of seventy-seven directors (10%) indicated a reduction of FTE due to the COVID-19 pandemic during the 2020–2021 school year, it is logical to conclude that with fewer students in programs overall and with the likelihood of reduced enrollment at the elementary and middle levels, that a wave of decreased enrollment could continue for up to eight years (assuming band begins in fifth or sixth grade) as this effect of the COVID-19 pandemic works itself through the school systems. This would imply that director FTE could be affected for years to come. Directors must focus on retention at this time to maintain as many students as possible in their programs from year to year to avoid reductions in their band programs.

Considering that high school music students become college music students, a decrease at the secondary level would imply a likely decrease in college music students and music majors. Considering that the COVID-19 pandemic could affect secondary schools for up to eight years beyond the 2020-2021 school year, it would imply that collegiate programs could see the effects of the COVID-19 pandemic in their enrollments for the subsequent twelve years. To follow this line of logic further, this may mean that there will be fewer music teachers and music professionals as these students grow into adulthood. This could lead to reduced staffing at the collegiate level, a music teacher deficiency, and other professional shortages. Limited collegiate

music could also reduce the number of consumers of classical music and music products in the future, as reported post-pandemic by music retailers.²⁶⁸

Finding more band students enrolled in non-metro schools than in metro schools was an unexpected observation. It fostered questions and implications beyond considering the COVID-19 pandemic. This disparity may imply different opportunities and inequities between metro and non-metro schools in Minnesota. Continued study of this phenomenon could lead to a greater understanding of why non-metro schools have higher levels of participation. Schools could perhaps apply this knowledge to increase band participation in metro schools.

Thesis Summary

The full impact of the COVID-19 pandemic and its effects on band programs has had minimal study thus far. The purpose of the study was to explore the possible impact of the COVID-19 pandemic on high school band programs in Minnesota. This mixed methods study set out to collect initial information about how the COVID-19 pandemic impacted high school band programs in Minnesota and to discover how Minnesota band directors perceived the impact of the COVID-19 pandemic on their band programs. This study's significance was enhanced by viewing information from the 2020–2021 school year, the first full school year affected by the COVID-19 pandemic. The sooner the music education community is aware of the possible impact, the sooner it can calculate a response. This study also created a foundation for future studies of the COVID-19 pandemic and its effects.

The research results observed support the proposed hypothesis:

²⁶⁸ “Analysis,” Pattern Data Science.

1. The COVID-19 pandemic likely impacted participation in high school band programs in Minnesota in terms of enrollment, program size, and program offerings.
2. The perceptions of Minnesota band directors on the effect of the COVID-19 pandemic on their band programs will identify reduced program enrollment, reduced band FTE in their schools, and reduced or delayed musical ability in their ensembles.

Through the review of enrollment data from the Minnesota Department of Education, decreases in Minnesota high school band program enrollment were observed measuring from before the onset of the COVID-19 pandemic to the school years after it began. Most Minnesota high school band directors identified reduced enrollment in their programs. Some identified reduced band director FTE and reduced musicianship in their ensembles due to the COVID-19 pandemic. The results of this study indicate that Minnesota high school band directors must work to combat the challenges of the COVID-19 pandemic's impact on their band programs for years to come.

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Appendix A

Citi Program Course Certificate

		Completion Date 12-Sep-2021 Expiration Date 11-Sep-2024 Record ID 44802090
This is to certify that:		
Matthew Marsolek		
Has completed the following Citi Program course:		Not valid for renewal of certification through CME.
Social & Behavioral Research - Basic/Refresher (Curriculum Group)		
Social & Behavioral Researchers (Course Learner Group)		
1 - Basic Course (Stage)		
Under requirements set by:		
Liberty University		
		
Verify at www.citiprogram.org/verify/?wed267002-81b2-49fc-90e9-8295b7a0e8ca-44802090		

Appendix B

IRB Approval Letter

LIBERTY UNIVERSITY

INSTITUTIONAL REVIEW BOARD

April 12, 2022

Matthew Marsolek
Rebecca Watson

Re: IRB Exemption - IRB-FY21-22-683 Minnesota High School Band Directors Perceptions on the Effects of COVID on Their Band Programs

Dear Matthew Marsolek, Rebecca Watson,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP

Administrative Chair of Institutional Research

Research Ethics Office

Appendix C

Informed Consent Form

Consent

Title of the Project: Minnesota High School Band Directors' Perceptions on the Effects of COVID-19 on Their Band Programs

Principal Investigator: Matthew Marsolek, DME Candidate

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be 18 or older and have taught in a high school band program during the 2019-2020 and/or 2020-2021 school year. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

The purpose of the study is to collect information on how the COVID-19 pandemic may have affected high school band programs in Minnesota.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following:

1. Take a short survey to collect information. Please answer each survey question to the best of your knowledge and ability. This survey should take approximately 5-10 minutes to complete.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include a further understanding of how the COVID-19 pandemic may have affected high school band programs in Minnesota.

What risks might you experience from being in this study?

The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be anonymous. No names or identifying information will be collected in this survey.
- Data will be stored on a password-locked computer and may be used in future presentations and/or research.

How will you be compensated for being part of the study?

Participants will not be compensated for participating in this study.

Liberty University
IRB-FY21-22-683
Approved on 4-12-2022

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Matthew Marsolek. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at [REDACTED]. You may also contact the researcher's faculty sponsor, Dr. Rebecca Watson, at [REDACTED].

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

Before agreeing to be part of the research, please be sure that you understand what the study is about. You can print a copy of this page for your records. If you have any questions about the study later, you can contact the researcher using the information provided above.

Appendix D

Band Director Survey²⁶⁹

Band Director Perceptions of COVID-19 Pandemic on MN HS Band Programs

Consent

Title of the Project: Minnesota Band Director Perceptions of the Effects of the COVID-19 Pandemic on Minnesota High School Band Programs

Principal Investigator: Matthew Marsolek, DME Candidate

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be 18 or older and have taught in a high school band program during the 2019-2020 and/or 2020-2021 school year. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

The purpose of the study is to collect information on how the COVID-19 pandemic may have affected high school band programs in Minnesota.

²⁶⁹ This survey is transcribed by Matthew G. Marsolek from the original survey instrument created on Google Forms.

What will happen if you take part in this study?

If you agree to be in this study, you will be asked to do the following things:

1. If you are an eligible participant and consent to participate in the study, click the link below.
2. This study utilizes a short survey to collect information. Please answer each survey question to the best of your knowledge and ability. This survey should take approximately 5-10 minutes to complete.

How could you or others benefit from this study?

Benefits to society include a further understanding of how the COVID-19 pandemic may have affected high school band programs in Minnesota.

What risks might you experience from being in this study?

The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be anonymous. No names or identifying information will be collected in this survey.

- [e.g., Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted.] [Note: Data should be retained for three years upon completion of the study.]

How will you be compensated for being part of the study?

Participants will not be compensated for participating in this study.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please exit the survey and close your internet browser.

Your responses will not be recorded or included in the study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Matthew Marsolek. You may ask any questions you have now. If you have questions later, you are encouraged to contact him at [REDACTED].

You may also contact the researcher's faculty sponsor, Dr. Rebecca Watson at [REDACTED]

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

Before agreeing to be part of the research, please be sure that you understand what the study is about. You can print a copy of this page for your records. If you have any questions about the study later, you can contact the researcher using the information provided above.

SURVEY QUESTION 1: Do you wish to Participate in this study?

Yes

(If yes is selected, participant sees Section 1)

No

(If no is selected, participant then sees Declined Participation Page)

Declined Participation

You have declined to participate in the survey. Thank you for your time. You may close the browser or click submit below.

Section 1 of 3: Band Program Enrollment

Please respond to the following questions about your band program's enrollment before and after the COVID-19 pandemic began.

SURVEY QUESTION 2: What impact, if any, do you believe the COVID-19 Pandemic had on your band program's enrollment between the 2019-2020 (prepandemic) school year and the 2020-2021 school year?

(Choose the one response that you believe best answers the question)

1. Significant Decrease in band program enrollment
(Sees page Section 1, continued (Decrease or no change in HS band program enrollment))
 2. Slight Decrease in band program enrollment
(Sees page Section 1, continued (Decrease or no change in HS band program enrollment))
 3. No Impact/no noticeable increase in band program enrollment
(Sees page Section 1, continued (Decrease or no change in HS band program enrollment))
 4. Slight Increase in band program enrollment
(Sees page Section 1, continued (Band Program Increase))
 5. Significant Increase in band program enrollment.
(Sees page Section 1, continued (Band Program Increase))
-

Section 1 of 3 (Continued)

(Band enrollment increase)

SURVEY QUESTION 2: What factors do you believe lead to the increase in your school's band program enrollment between the 2019-2020 school year and the 2020-2021 school year?

(Free Response Answer)

Next (Moves to Section 2 of 3)

Section 1 of 3 (Continued)

(Decrease or no change in HS band program enrollment)

SURVEY QUESTION 4: How do you believe each factor affected the change in enrollment between the 2019-2020 school year and the 2020-2021 school year?

Please respond to each factor.

Parental concerns related to health and safety.

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

Social Distancing/Spacing within the ensemble.

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

Personal Protective Equipment (Specialized musician masks, bell covers, etc).

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

Reduced ensemble capacity in rooms/reduced class size.

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

Required use of Flex or alternate literature due to ensemble make-up.

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

Decreased level of musicianship within ensembles.

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

Relocation of rehearsal space (outdoors, gyms, etc).

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

Additional sanitation procedures.

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

Decreased social interaction among members of the ensemble.

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

Next (Moves to Section 1 of 3 continued)

Section 1 of 3 (continued)

SURVEY QUESTION 5: How do you believe each factor affected the change in enrollment between the 2019-2020 school year and the 2020-2021 school year?

Please respond to each factor.

Online/Remote Learning.

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

Hybrid learning model.

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

Decrease in live rehearsal time.

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

Cancellation of live performances.

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

Limited access to technology.

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

Reduction or cancellation of extra-curricular ensembles.

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

Cancellation of music-related travel.

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

Reduced ability to recruit incoming band members.

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

Elimination of band class.

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

School schedule change.

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

Overall school enrollment decline.

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

Other Factors (Please specify below)

- A. Was not a factor/Not Applicable
- B. Small/minimal factor in decreased enrollment
- C. Moderate factor in decreased enrollment
- D. Strong factor in decreased enrollment
- E. Very strong factor in decreased enrollment

SURVEY QUESTION 6: OTHER: If you chose "Other Factors" in the previous question, please list and explain the additional factor/s you believe had an impact on enrollment in your high school band program between the 2019-2020 school year and the 2020-2021 school year. Include all you believe may apply. (If you did not choose "Other" in the previous question, you may leave this question blank.)

(Free Response Answer)

Continues to Section 2: Band Program Offerings

Section 2: Band Program Offerings

Please respond to the following questions about band program offerings, first curricular and then extra-curricular.

SURVEY QUESTION 7: What impact, if any, do you believe the COVID-19 pandemic had on your band program's CURRICULAR offerings between the 2019-2020 school year and the 2020-2021 school year?

(Choose one response that you believe best answers the question)

- 1: Significant reduction in curricular program offerings
- 2: Slight reduction in curricular program offerings
- 3: No effect/no noticeable impact on curricular programming offered
- 4: Slight increase in curricular program offerings
- 5: Significant increase in curricular program offerings

SURVEY QUESTION 8: Based on your previous answer, how were your curricular programs affected between the 2019-2020 school year and the 2020-2021 school year?

(Choose one response that you believe best answers the question)

1. Program eliminated
2. Program reduced/fewer sections or ensembles offered
3. No change in programming
4. Existing program increased/more sections offered
5. New program, courses or ensembles added
6. Other (Please elaborate below)

SURVEY QUESTION 9: Other: If you chose "Other" for the previous question, please elaborate on how your curricular program offerings were affected between the 2019-2020 school year and the 2020-2021 school year.

(If you did not choose "Other" in the previous question, you may leave this question blank.)

(Free Response Answer)

SURVEY QUESTION 10: What impact, if any, do you believe the COVID-19 pandemic had on your band program's EXTRA-CURRICULAR offerings between the 2019-2020 school year and the 2020-2021 school year?

(Choose one response that you believe best answers the question)

- 1: Significant reduction in extra-curricular offerings
- 2: Slight reduction in extra-curricular offerings
- 3: No impact/no noticeable impact on extra-curricular offerings
- 4: Slight Increase in extra-curricular offerings
- 5: Significant Increase in extra-curricular offerings

SURVEY QUESTION 11: How were each of the following extra-curricular programs affected between the 2019-2020 school year and the 2020-2021 school year due to the COVID-19 pandemic?

Please respond to each factor.

Jazz Band

- A. Removed
- B. Reduced
- C. No Change/Not Applicable
- D. Increased
- E. Added Program

Marching Band

- A. Removed
- B. Reduced
- C. No Change/Not Applicable
- D. Increased
- E. Added Program

Pep Band

- A. Removed
- B. Reduced
- C. No Change/Not Applicable
- D. Increased
- E. Added Program
- F.

Pit Orchestra

- A. Removed
- B. Reduced
- C. No Change/Not Applicable
- D. Increased
- E. Added Program

Solo/Ensemble Contest

- A. Removed
- B. Reduced
- C. No Change/Not Applicable
- D. Increased
- E. Added Program

Music Listening Contest

- A. Removed
- B. Reduced
- C. No Change/Not Applicable
- D. Increased
- E. Added Program

Drumline

- A. Removed
- B. Reduced
- C. No Change/Not Applicable
- D. Increased
- E. Added Program

Percussion Ensemble

- A. Removed
- B. Reduced
- C. No Change/Not Applicable
- D. Increased
- E. Added Program

Other (Please elaborate below)

- A. Removed
- B. Reduced
- C. No Change/Not Applicable
- D. Increased
- E. Added Program

SURVEY QUESTION 12: Other: If you chose "Other" for the previous question, please include the extra-curricular ensemble/s and how they were affected between the 2019-2020 school year and the 2020-2021 school year.

(If you did not choose "Other" in the previous question, you may leave this question blank.)

(Free Response Answer)

Continues to Section 3: Band Director FTE

Section 3: Band Director FTE

This section considers band director FTE (full time equivalency), otherwise known as staffing.

SURVEY QUESTION 13: Did your high school (grades 9-12) experience any changes in band director FTE between the 2019-2020 and 2020-2021 school year?

(Choose one answer that you believe best answers the question)

1. Reduction in band director FTE
2. No Change in band director FTE
3. Increased band director FTE

SURVEY QUESTION 14: What was your band program's 9-12 band director FTE in the fall of 2019-2020 school year?

(For example, 1.0 is one full time band director, 0.5 is a half-time band director. If your program had 2 full time band directors, the FTE would be 2.0.) NOTE: If a 1.0 FTE is spread across multiple grade levels (5-12, 6-12, 7-12, etc) estimate the 9-12 FTE.

(Short answer response)

SURVEY QUESTION 15: What was your band program's 9-12 band director FTE in the fall of 2020-2021 school year?

(For example, 1.0 is one full time band director, 0.5 is a half-time band director. If your program had 2 full time band directors, the FTE would be 2.0.) NOTE: If a 1.0 FTE is spread across multiple grade levels (5-12, 6-12, 7-12, etc) estimate the 9-12 FTE.

(Short answer response)

SURVEY QUESTION 16: What do you believe was the biggest factor in your school's band director FTE change?

(Choose one response that you believe best answers the question)

1. There was no change in FTE
2. Reduced band program enrollment due to the COVID-19 pandemic
3. Reduced band program enrollment unrelated to the COVID-19 pandemic
4. Reduced course offerings or elimination of ensembles
5. Change in school day schedule
6. Declining school enrollment
7. Added course offerings/ensembles
8. Growing school enrollment
9. School consolidation
10. Increased band program enrollment
11. Increase due to adding online class offerings

SURVEY QUESTION 17: Other: If you chose "Other" for the previous question, what do you believe was the biggest factor in your school's band director FTE change?

(If you did not choose "Other" in the previous question, you may leave this question blank.)

(Free Response Answer)

(Continues to Survey Submission Page)

Survey Submission

If you have decided not to participate, you may close your browser or click "Clear Form" below.

If you would like to review your responses before submitting, you may click the "Back" to visit previous pages.

If you are still willing to participate and would like to submit your responses, please click "Submit" below.

[Back](#)

[Submit](#)

[Clear Form](#)

Appendix E

Social Media Release

Marsolek Social Media Recruitment Post:

Attention MN HS Band Directors: I am conducting research as part of the requirements for a Doctor of Music Education at Liberty University. The purpose of my research is to study the effect of the COVID-19 pandemic on HS Band programs in Minnesota. To participate, you must have taught high school band in Minnesota during the 2019-2020 school year and/or the 2020-2021 school year.

Participants will be asked to complete an anonymous online survey, which should take about 5-10 minutes. If you would like to participate and meet the study criteria, please click the link provided at the end of this post. A consent document will be provided as the first page of the survey. Please review this page, and if you agree to participate, click the “proceed to survey” button at the end.

https://docs.google.com/forms/d/e/1FAIpQLSeLh5SmEBjxMI dhSqT0VpDLZpHJ-8QDUy887s7jw1bdIsMfew/viewform?usp=sf_link

Summary: MN HS Band directors, please click the link to complete a short survey about the effects of the COVID-19 pandemic on your band program.

Appendix F

Email Release

[Introduction message to professional organizations asking to share this study]:

Greetings,

I currently teach band in the Spring Lake Park School district in Minnesota and am an [insert professional organization] member. I am pursuing my Doctorate of Music Education degree. For the research component of my thesis, I am surveying high school band directors about their programs based on their experiences during the COVID-19 pandemic. I would be grateful if you could pass the following information and link along to membership:

Greetings Colleagues,

I am a band teacher in the Spring Lake Park School district in Minnesota and am pursuing my Doctorate of Music Education through the School of Music at Liberty University. The purpose of my research is to gather information about the COVID-19 pandemic's effect on Minnesota high school band programs. I am writing to invite eligible participants to join my study.

Eligible participants must have taught high school band in Minnesota during the 2019-2020 school year and/or the 2020-2021 school year. Participants will be asked to complete a short online survey (5-10 minutes). Participation will be completely anonymous, and no personal identifying information will be collected.

To participate, please click here to complete the survey.

Please contact me at mmarsolek@liberty.edu with questions, or to obtain more information about this study.

A consent document is provided as the first page of the survey. The consent document contains additional information about the research. After you have read the consent form, please click the button to proceed to the survey. Doing so will indicate that you have read the consent information and would like to take part in the survey.

Sincerely,

Matthew G. Marsolek
Band Teacher, Spring Lake Park Schools
Doctoral Candidate, Liberty University
[REDACTED]

Summary: MN HS Band directors, please click this link to complete a short survey about the effects of COVID-19 pandemic on your band program.