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## Can You Hear Me Now? An Improvement Science Study on Policy Change in Public Schools

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CAN YOU HEAR ME NOW? AN IMPROVEMENT SCIENCE STUDY ON  
POLICY CHANGE IN PUBLIC SCHOOLS

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A Dissertation  
Presented to  
the Graduate School of  
Clemson University

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In Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Philosophy.  
Educational Leadership

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by  
William Gary Rhoden Jr.  
August 2024

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Accepted by:  
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## ABSTRACT

The purpose of this study was to discover what the perceptions of music teachers, specifically high school band directors in upstate South Carolina (S.C.), on their ability to affect meaningful policy change in SC public schools and what roadblocks exist or remain in the way of affecting policy change. Using improvement science as the methodology, this study employed the Plan, Do, Study, Act (PDSA) cycle to discover the effectiveness of this study, make recommendations for future research, and plan for future PDSA cycles. This study used interviews to collect initial data on the participants' perceptions on their abilities to affect policy change. Using the interview data, I formed an intervention in the form of an infographic to distribute to the entirety of the upstate SC band directors accompanied with a survey collecting further data on the participants' perceptions on their ability and data on how effective the infographic was on raising their perceptions on the participants' ability to affect policy change.

The data showed that the infographic was successful in raising the participants' perceptions on their ability to affect policy change and a matched pairs t-test showed that the improvement in perception was statistically significant. The data also showed that information on the problem, a positive relationship with administrators, teaching experience, experience in a policy change movement, and school leadership experience were all major factors in improving the participants' perceptions. Recommendations were made for educational leaders to better involve teachers in the policymaking process and to improve the perceptions of teachers' ability to affect meaningful policy change in S.C. public schools.

## **DEDICATION**

I dedicate this dissertation to my best friend, someone who inspired me to pursue greatness, someone who always believed in me, and a person who taught me to never, ever give up—Bryan Bone. Rest easy, my friend.

## ACKNOWLEDGMENTS

First, I want to thank God and my Lord and Savior Jesus Christ. Thank you for the gifts you have blessed me with and the support system you have placed in my life. I am nothing without you.

To my wife Ashley, thank you for being the most incredible partner and friend. You have been there for me through all the challenges, failures, successes, and celebrations. You are an incredible mother to our dear daughter Emmi, and we both love you so much!

To my mother, you have been my moral compass my entire life. You have believed in me no matter what. You clapped for me so loudly that I never noticed who didn't. God could not have created a more perfect mother for me, and I thank Him every day for you. I love you!

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## **CHAPTER ONE**

### **INTRODUCTION**

In the spring of 2018, Senate Bill 302 (S.302) was presented in the South Carolina (S.C.) Statehouse. S.302 was created to change the policy regarding what could be substituted for the Physical Education (PE) requirement in secondary schools. Previously, the only course that could be substituted in place of PE was a Junior Reserve Officers' Training Corps (JROTC) course. Within S.302 marching band was proposed as another alternative for the PE requirement for graduation. The bill received considerable pushback from the S.C. High School League and a group of S.C. PE instructors. S.302 also gained enormous support from the South Carolina Band Directors Association (SCBDA). After a considerable effort from members of the SCBDA, along with local representatives, the bill passed by a narrow margin. Rita Allison, a state representative, and chair of the House Education Subcommittee was in constant communication with several prominent band directors gaining their support for the bill. While the SCBDA and other S.C. supporters were ultimately successful, they learned how embedded politics are in changing policies in within S.C.. Members of the SCBDA did the best they could in garnering support, but there was no system those members could utilize to guarantee the success of the bill.

Policy change is complex and there was no clear approach to getting this educational policy changed. Ydesen and Anderson (2020) discussed the complexity and difficulty of policy change in education by analyzing the interaction of the political level, the civil servant level, and the school level. Ultimately, the authors determined the

“cross-organizational stakeholder involvement” to be the biggest hindrance in adequately implementing policy change in that case study (Ydesen & Anderson, 2020, p. 77).

Pearson and Rao (2006) found similar difficulties in changing and implementing new policy in education. The authors discussed the social and political factors that drive education policy change and the importance of the classroom educators that ultimately implement policy change in the classroom (Pearson & Rao, 2006).

This story and supporting literature highlights how complex policy change is in education (and S.C.), adds experiential knowledge to my argument, and connects directly to my research problem which involves a lack of a system for educational leaders to advocate and enact policy change in S.C.. I believe my experiences in this story are consistent with changing policy in other areas of S.C. education. It is my hope that my study will begin to illuminate an easier path or highlight a system educational leaders can better utilize when advocating for policy change.

### **Problem of Practice**

In this portion of my paper, I will define policy, how policy change is complex, a framework to better understand a health and safety concern in S.C. classrooms, and I will explore how this understanding health and safety concerns can potentially impact policy decisions in S.C..

Aasen et al. (2014) defined policy as:

*A policy* is typically described as a principle or rule to guide decisions and achieve rational outcome(s). Policy refers to the *what* and *why* generally adopted by governance bodies within the public and private sector. A policy can be considered as a

statement of intent or a commitment. While law can compel or prohibit behaviors, policy can only guide actions toward those behaviors or actions that are most likely to achieve a desired outcome. (p. 719).

Policy in education is implemented daily in schools and school districts (Rigby et al., 2016). Policy in education will constantly evolve as we evolve as educators and our students evolve as humans. The direction of educational policy, however, is complex. Policy change is highly connected to political pressures and can be affected by what knowledge base or what lens you look at the potential policy change through (Aasen et al., 2014). I believe it is important to know the connection of policy and policy change to politics. In the story I recounted above, politics were a primary driving force in that policy change. The added dimension of politics only complicates what path an educational leader would need to take toward advocating and pushing for a policy change at the local, district, or even state levels. When a problem in classrooms is discovered, there is no clear path or system for an educational leader to change policy for the benefit of these students.

Research has been conducted on how youth organizing influences education policy change (Conner & Zaino, 2014), how structure and agency influence educational policy and organizational change (Rigby et al., 2016), and how policies are rarely implemented as the policy was intended (Rowan & Miller, 2007). However, there is a lack of research regarding how an educational leader influences policy change. Below, I will begin to frame a health risk to students in S.C. music classrooms and further define this study's problem of practice.

During my time as an educator, I have personally experienced how important student health and safety are within the school building. In fact, it is an educational leader's responsibility, both legally and ethically, to care for the health and safety of both staff and students (Ellis & Leaf, 2005). Over the past 20 years, research in student health and safety has shown that educational leaders have recognized this responsibility. For example, recently there have been studies on mental stress and its ties to violent and psychologically unsafe behaviors (Yang & Yan, 2020), how e-cigarettes or similar devices are health and safety hazards within secondary schools (Fakeh Campbell et al., 2020), the dangers of guns within school walls (Ghiani et al., 2019; Rogers et al., 2018), and the health and safety challenges of reopening schools after the COVID-19 pandemic of 2020 (Aagaard & Earnest, 2021; Viner et al., 2021). Based on research and experiential knowledge it is safe to assume that health and safety should be a priority for educators and educational leaders alike.

With student health and safety a paramount concern, educational leaders must look at classroom instruction and whether that poses a health and safety risks to students. For example, science labs require students to take precautions when handling chemicals or interacting with an open flame. While there are rules in place to ensure students are being protected, the subject matter in a science lab places students in a situation where health and safety are a known concern. At some point in time, an educational leader had to determine a policy for safety in science. In fact, science lab safety policy improvement continues to be an area of research (Ménard & Trant, 2020).

While the risks of injury or other health related issues of playing a school sport are well documented (Adams et al., 2014; Heinz, 2018; Mummareddy et al., 2019; O'Connor et al., 2017; Ritzer et al., 2021; Rowe & Miller 1991; Sarmiento et al., 2017; Scarneo et al., 2019; Tirabassi et al., 2016; Yard et al., 2009), schools and educational leaders have taken steps to ensure students are as safe as possible. For example, football teams and other school sports are limiting time in extreme heat to avoid issues with heatstroke (Kerr et al., 2013; Mummareddy et al., 2019; Scarneo-Miller et al., 2020; Scarneo-Miller et al., 2021; Tripp et al., 2015). Even the COVID-19 pandemic caused many sports organizations to consider policy changes for the benefit of athlete health (Sanderson & Weathers, 2022). If sports coaches, science teachers, and others are going to take precautions to protect students in their respective courses/activities, educational leaders must continue to ensure all other courses and activities are taking student health and safety into consideration, as well.

In my experience as a music teacher and a band director, these student health and safety risks are not as big of a concern for educational leaders. While I was a high school marching band director, we were asked to follow the same heat guidelines as the fall sports (specifically football), and we also took precautions for rain and lightning. However, my administration (on the school and district levels) never fully considered the potential auditory damage that marching band instruments may cause. Marching band involves performing on and around instruments that are loud. According to the Center for Disease Control (CDC) and the National Institute for Occupational Safety (NIOSH), the recommended exposure limit (REL) for a worker is 85 decibels on average using the A-

frequency response (or more commonly known as dBA) (NIOSH, 1998). However, musicians, while typically performing or practicing in shorter than 8-hour stretches, can reach the REL by NIOSH in only one hour—even if the performer experiences a dBA average of 94 dBA (NIOSH, 2015). In fact, many musicians exceed the REL set by NIOSH daily (Chesky, 2010; Gopal et al., 2013; Miller et al., 2007; Phillips & Mace, 2008; Tufts & Skoe, 2018; Washnik et al., 2016). Along with NIOSH, the National Association of Schools of Music (NASM), which is the primary accrediting authority for schools of music, require their members to follow a standard of health and safety practices which include hearing protection and education on hearing disorders in music courses, ensemble settings, and in personal practice settings (NASM, 2022).

Along with workers, children are also at risk for noise induced hearing loss (NIHL). In 2008, Chesky (2008) reported that 12.5% of children aged 6 to 19 were already affected by NIHL. Chesky (2008) also suggested that the percentage of children affected by NIHL will rise given the popularity of personal music devices, the iPod for example, and the use of earbuds. Shargorodsky et al. (2010) suggested an even higher percentage (16-20%) of children aged 12-19 suffered from some form of NIHL. The marching band poses a risk to a student's aural health regardless of the combination of instruments being played or even if the student is performing alone (Washnik et al., 2021). This poses a complex problem for educational leaders. While marching bands must rehearse both during and after school hours, there is an inherent risk to student hearing and aural health by practicing and performing in the ensemble. Like the evolving



health and safety precautions for school sports, educational leaders must face the conundrum of how to protect students' ears.

The research above suggests that students are at risk for NIHL in music classrooms in schools. While there is evidence of these risks and interventions exist to potentially alleviate these risks in music classrooms, very few, if any, music programs in S.C. have elected to utilize these interventions. The overall problem of practice I will be studying is that there is no clear system for policy change or change in practice once these risks have been brought to the attention of music educators and administrators. While there may be a political path to policy change, as I have alluded to, educational leaders have failed to utilize this path on this issue. It is my hope that this study will begin to illuminate why and what other paths to policy change advocacy may exist.

In the following sections, I will discuss research on musical ensembles in which research exists on the use of hearing protection, what we know about using hearing protection in musical ensembles, policy change in education, and the potential avenues that exist for policy change in education.

### **Research Rationale**

I have spent the last thirteen years of my teaching career as a music educator in some fashion—primarily as a band director. Over the past decade, I have noticed an increase in the use of hearing protection, in the form of earplugs, by the performers in large ensembles. While the previous section detailed some broad literature to help expose the problem of practice and research questions for this study, I will use this section to better detail literature and prior research that will help inform my study. There are several

areas of literature I will explore: musical ensembles in which research exists on the use of hearing protection, what we know about using hearing protection in musical ensembles, policy change in education, and potential avenues that exist for policy change in education.

### ***Research on Hearing Protection in Musical Settings***

The following section will discuss research in several different musical settings. Research has been conducted on the need for hearing protection in multiple musical ensembles. This research informs my dissertation study by identifying in detail a health risk that educational leaders should eliminate by changing policy to influence a change in classroom practice.

The need for musicians to use some form of hearing protection is widely known (Federman & Picou, 2009). While NIOSH (2015) recommended that appropriate hearing conservation interventions be in place for “employers, music venue operators, schools and colleges, and anyone responsible music-related activities” (p. 3), there have been multiple studies on the need for some form of hearing protection for musicians. With relation to hearing protection and sound level dosage, there have been studies conducted on orchestral ensembles (Gade, 2012; O’Brien et al., 2008; O’Brien et al., 2014; Wenmaekers et al. 2017) wind band settings (Chesky, 2010), jazz ensembles (Gopal et al., 2013), and personal practice settings (Killion, 2012; Phillips & Mace, 2008; Miller et al., 2007; Tufts & Skoe, 2018). The literature clearly shows that there is a need for musicians to wear hearing protection. Often, the musical ensembles listed above are smaller than a typical high school band program. In my experience, classes in a high

school band program can be over 100 students at a large high school. With settings like jazz ensembles and personal practice time already crossing the threshold of the REL by NIOSH (Killion, 2012; Phillips & Mace, 2008; Miller et al., 2007; Tufts & Skoe, 2018), a marching band with more student musicians poses a much higher level of danger to student health. This literature supports my study by providing an overall look at how the issue of loud music and the risk of student NIHL is present in almost any music ensemble a K-12 may offer.

With the need for hearing protection for musicians evident, there is also literature that highlights what research has been done on the use of hearing protection while performing in a musical ensemble. Research has shown that wearing earplugs while performing benefits the musician to some degree (Bockstael et al., 2015; Chesky & Amlani, 2015; Chesky & Amlani, 2014; Jacoby, 2014; Niquette, 2006). Along with that research, audiologists have suggested the use of earplugs as essential for musicians (Wilson et al., 2013). To what degree earplugs are beneficial is still being studied. Chesky and Amlani (2015) recommended that musicians wear what is being referred to as “musician earplugs”. Musician earplugs provide a flat attenuation which provides equal or similar protection for the wearer across frequencies. There are various types of musician earplugs, and several are marketed as more beneficial than others. I spoke with a representative of a maker of high-fidelity earplugs (Vibes) and while the representative was only able to offer minimal information on the design of the earplugs, the company makes claims that there is an average decibel reduction of 22 decibels and will allow the musician to continue hearing frequencies helpful for performing (J. Sherwood, personal

communication, May 16, 2022). However, as Chesky and Amlani (2015) suggested, these companies may be overstating the protection being offered to musicians and more research must be conducted. The above research provides what has been studied on the use of hearing protection in musical ensembles. The literature helps me build the argument that hearing protection does benefit musicians although to what degree that benefit is, is still being studied. Although the study I am proposing is not intended to prove the efficacy of hearing protection in musical ensembles, this literature provides supports my overall claim that hearing protection may prove to be beneficial to the aural health of students.

With research (Bockstael et al., 2015; Chesky & Amlani, 2015; Chesky & Amlani, 2014; Jacoby, 2014; Niquette, 2006) showing the need for hearing protection for musicians and the use of earplugs is beneficial, albeit to an undetermined degree, there also existing literature on what we know about the use of earplugs in marching band. While there is no literature on how many marching bands across the US have begun using earplugs or what kind of earplugs are being used in marching bands, there is research on the need for some form of hearing conservation program (including the use of earplugs) in marching bands.

I have performed in a marching band, performed in a drum corps, and I have taught marching band in some capacity for the past 12 years. I also have performed in a symphony orchestra, a jazz ensemble, small brass chamber groups, and a large wind ensemble. In my experience, the marching band poses the greatest threat for NIHL due to the dosage and frequency of decibel levels that exceed the REL set by NIOSH. Marching

band members can experience dangerous levels of sound regardless of the instrument or instrument combination being played (Washnik et al., 2021). In fact, Russell and Yamaguchi (2018) found that even healthcare workers that assist marching bands, who are merely in close proximity of the performers, experienced dangerous levels of sound exposure. Jin et al. (2013) also found that marching band students rehearsed and performed up to and greater than 40 hours per week thus further increasing their dosage of sound over the REL set by NIOSH.

Hearing conservation programs have been recommended to marching band ensemble members and their respective directors (Jin et al., 2013) and studies have been conducted to determine the best course of action for a hearing conservation program (Auchter & Le Prell, 2014; Jin et al., 2013; Washnik et al., 2021). Suggestions include distancing musicians, limiting exposure, and the use of earplugs. This literature supports my study by providing some background on what noise levels have been experienced in a marching band and providing what recommendations are already in studies for approaching the issue of loud noises and marching band students.

With researching showing that musicians, especially marching band members, need some form of hearing conservation program and earplugs serving as one form of protection against NIHL for music students, what happens when students are educated on the need for hearing protection? There have been a couple studies on students and their use of earplugs after being taught the benefits of wearing earplugs in an ensemble (Auchter & Le Prell, 2014; Washnik et al., 2021). However, both studies showed that while earplug usage increased, student attitudes toward their own aural health did not

change significantly. Washnik et al. (2021) found that “Despite such hazardous sound exposure, it was found that marching band members are minimally concerned about the effects of high sound exposure on their performance and health” (p. 10). Auchter and Le Prell (2014) also noted that student comments from their study provided future opportunities to better train students on their awareness of aural health and the importance of using hearing protection. Jacoby (2014) recommended that band directors lead by example and wear hearing protection while more research is conducted on the benefits of hearing protection in marching bands. As a band director, I believe this is sound advice. This literature will provide further information that will serve as an intervention the participants will consume.

In conclusion, there is ample research to show there is a risk to students in music settings. Musical instruments are loud and students in schools are being exposed to dangerous levels noise dosage. The risks of NHIL will not be mitigated without a push from educational leaders to change policy and force a change in practice in music classrooms. While the overall problem I am studying is intended to encourage conversations among educational leaders regarding the health and safety of students, my research questions ask how educators and educational leaders, specifically band directors in this study, perceive their ability to affect meaningful policy change and then what roadblocks are present in the band directors’ ability to affect meaningful policy change. The literature included in this section will be used as an intervention for the participants (band directors) to consume. In turn, I will then collect how that intervention changes or

does not change the participants' perception of their ability to affect policy change in their classrooms, school, and school districts.

### ***Education Policy and Avenues for Change***

While I have presented a plethora of information supporting the need for musicians to use some form of hearing protection in S.C. schools, this study is not on the efficacy of hearing protection. The goal of this study is to better understand what roadblocks are in place when discussing and presenting the need for a policy change in S.C. schools. While most of my literature is on the need for hearing protection, that information will serve as an intervention and will be distributed to music educators for feedback. The data I collect will be in response to a policy change need being highlighted. The policy change is that hearing protection programs should be either encouraged or enforced in S.C. music programs (especially band programs). However, data will be collected on what roadblocks remain for policy change and how can we continue to develop a better system for educational leaders to form and enact policy change in S.C. schools.

There are several suggestions for policy change. From the concept of knowledge regimes and their role in policy change (Aasen et al., 2014) to a sociological aspect of micro-macro-organizational dynamics driving policy ideas (Edwards Jr & Mauro, 2021), policy change is argued as a nuanced and complex idea. Even the concept of when policy change becomes substantive after a formal policy change has been made is a point of contention (Durazzi, 2022). Educational policy change becomes even more complex as

there are political implications being considered before and after policy changes occur (Aasen et al., 2014).

Policy change is complex, and it is established that education policy change is often political (Pearson & Rao, 2006; Ydesen & Anderson, 2020). There is limited literature that explores what avenues exist for educational leaders to advocate for policy change. According to McDonnell and Elmore (1987), there are four primary policy change instruments: mandates, inducements, capacity-building, and system-changing. Mandates are rules that an individual or an organization is expected to comply with. A mandate does not include any transfer of money as an incentive to comply. An inducement is a transfer of money expected to induce a compliance with a set of rules. Capacity-building is a long-term instrument where money is transferred to individuals or an agency to invest in future benefits. System-changing transfers authority, not money, among individuals and/or agencies (McDonnell & Elmore, 1987). Another policy change instrument is hortatory or symbolic. Liao (2019) defined a hortatory or symbolic policy change tool as assuming “that people are motivated from within and decide whether to take policy-related actions on the basis of their beliefs and values” (p. 94). Schneider and Ingram (1990) found that while hortatory policy tools may not offer a tangible payoff, the use of a hortatory policy tool encourages compliance, utilization, and support of policy because individuals are motivated from within, and policy is changed because it will align better with these individuals’ beliefs and values. Sutherland (2022) suggested that hortatory tools “rely on strategic persuasion” (p. 987).



While all five policy change instruments do not provide a clear system or avenue for educational leaders to change policy, an educational leader can better understand what instrument may be appropriate for the policy change being proposed. For example, a private-school advocate would want to consider using system-changing to redirect funds or authority from public-schools to private-schools. I believe in the case of this study educational leaders will advocate for hortatory policy change. Hortatory policy tools have been used in education as a persuasion method. For example, school boards have used communication about student assessment data to persuade community members to support funding schools (Sutherland, 2022). Another example of a hortatory tool is one I experienced firsthand. In 2014, Spartanburg School District 5 unsuccessfully proposed a bond referendum to renovate existing schools and build new schools to keep up with the rapid growth of the community. The bond was voted down due to a fear from the community over raising taxes. In 2020, the school district tried once again to pass a bond referendum for the same purposes. This time, the district used much more communication about how taxes would not be raised, why the bond was necessary, and how students in the district would directly benefit from the funds provided by the referendum. This hortatory approach proved successful as the bond passed on the second attempt.

While a mandate for hearing protection in S.C. music classrooms/music programs would assure a rule is in place for students to be protected, there is no guarantee that districts/schools will have the monetary resources to provide the needed materials. Using a hortatory approach assure that these policy actions or changes are made because educational leaders believe policy should change for the benefit and/or safety of students.

Knowing how policy change instruments and how much nuance is involved helps me better understand how complex the issue of policy change is. What is not well known is what path, political or not, exists for educational leaders to affect change. This is what I hope this study will begin to answer/highlight.

### ***Conclusion***

In conclusion, policy change is a complex issue and that there are many ways to approach policy change. The risks NIHL risks to students in S.C. music classrooms is an issue that would require a policy change to provide an equitable solution for all S.C. students participating in music programs. This policy change could take place in one of two places: at the local level with each school district allocating funds to mitigate the risks of NIHL in the classroom or at the state level where the state could now provide funds to school districts specifically for the use of NIHL mitigation measures. This study will focus on the local level; however, this study could be expanded to consider state-wide policy change in the future.

While the research is evident that policy change is a difficult and complex task, understanding how an educational leader advocates for policy change in S.C. is not evident. Aside from protesting on the steps of the S.C. statehouse, how does a teacher approach their principal to request a policy change and, in turn, how does that administrator take that request to the district level? Research is not clear on how a S.C. educator would advocate and affect policy change, yet, but this study is designed to investigate possible improvements to the process.

## **Research Question**

The problem of practice of this study is that there is no clear system for policy change or change in practice that is enacted by educators and/or educational leaders. The consequence of this problem is that even when educators and/or educational leaders are presented information or evidence that something needs to be changed, there is no clear path for these educators/educational leaders to affect change. In my experience, there is a substantial lack of precautions being taken in music programs where NIHL is clearly a risk. Also, many educational leaders have yet to even acknowledge NIHL as a health and safety issue in S.C. schools. This is like other health issues faced in education. For example, lead in drinking water has been a consistent topic studied since lead was discovered in water fountains in schools (Lambrinidou et al., 2010). At one time, however, lead in school drinking water was not a studied and was an overlooked issues in education. Therefore, it is the intention of this research to explore why many educators/educational leaders do not make attempts to affect change even when it is proven to be beneficial for students.

My study addresses this problem of practice by asking the following research questions: What is the perception of educators and educational leaders, specifically upstate S.C. band directors, to affect meaningful policy change. What roadblocks continue to hinder a more positive perception to affect policy change? Specifically, I seek to understand if providing useful information on NIHL in music classrooms in S.C. has any effect on a band director's perceived ability to influence a policy change (e.g.,

requiring students to wear some form of hearing protection, equipping music rooms with sound dampening equipment) for students participating in potentially harmful activities.

My study identifies what roadblocks are between educational leaders and policy change and, in turn, begin to identify a potential system for policy change in S.C. classrooms. While teachers and school level administrators are the individuals who work most closely with students, this study can connect these educational leaders' experiences and concerns with district level administrators and state level policy makers on a recommendation for empowering all educators/educational leaders to advocate and enact meaningful change.

My study also provides educational leaders with an opportunity to make music classrooms more equitable for their students. "Equity refers to the fairness with which benefits and costs are distributed among the involved users or stakeholders" (Zhang & Waller, 2018, p. 1560). While some students may have the resources to invest in quality hearing protection, some will not have the same resources. The use of school and district resources is a well-known decision educational leaders face each year.

### **Improvement Science Approach**

Research on policy and policy change along with the political and non-political factors exists (Aasen et al., 2014; McDonnell & Elmore, 1987). I would like to further explore what system of change is present for educators, and what can improve the perception an educator has on affecting that change. Improvement science is a methodological framework that guides "scholar-practitioners to define problems, understand how the system produces problems, identify changes to rectify problems, test

the efficacy of those changes, and spread the changes (if the change is indeed an improvement)” (Hinnant-Crawford, 2020, p. 1). The primary method employed in improvement science is the use of the Plan-Do-Study-Act (PDSA) cycle and according to Hinnant-Crawford (2020) any major deviation from the use of the PDSA method cannot be considered improvement science. While the PDSA cycle can be used to narrow your focus to a specific problem, the primary purpose of the PDSA cycle is to answer the question “How will I know a change is an improvement?” (Hinnant-Crawford, 2020, p. 154). In conjunction with the PDSA cycle, Langley et al. (2009, p. 24) developed a Model of Improvement which asked three questions:

1. What are we trying to accomplish? [What is our aim?]
2. How will we know that a change is an improvement? [What are our mechanisms for feedback?]
3. What change can we make that will result in an improvement? [What change can be introduced in our system to move us closer to our aim?]

These three questions combined with the PDSA cycle become the framework for improvement science (Langley et al., 2009).

My problem of practice is that there is no clear system for policy change or change in practice once an issue becomes evident in a classroom or educational program, such as the risks of NIHL in music classrooms. Essentially, improvement science is answering the question of “How will I know a change is an improvement?” (Hinnant-Crawford, 2020, p.154). For the purposes of my study, the framework of improvement science enabled me to address my problem of practice. I was able to develop a baseline

for how band directors perceive their ability to affect policy change in S.C. education. I also collected and analyzed data on what providing research and information does to those perceptions the band directors have. These two data collections helped me determine if there is a relationship between an educational leader's perceived ability to affect policy change and having research and information on a problem that needs a policy change to benefit students.

This study provides music educators and administrators information on how student aural health is being affected in music classrooms and, in turn, how that information shapes policy changes. Knowing how information illuminates the path to policy change and what roadblocks remain are key in studying what an effective system for policy change would look like. My study was designed to provide information for educational leaders to advocate for policy changes that reflect the needs of their students.

### **Key Terms**

**Aural health:** Refers to the health of a student's ears, and I will be presenting information to band directors on the health risks to student aural health.

**The South Carolina Band Directors Association (SCBDA):** the association all S.C. band directors are members of.

**Hearing protection:** anything that reduces the decibel levels entering the ears.

**Hearing conservation program:** an extension of hearing protection by manipulating time exposure to loud sounds along with environmental factors (e.g., proximity of musicians, sound dampening materials in the room, etc.).

## **Practice, Research, and Policy**

My study identifies roadblocks in the way of policy change educational leaders can more efficiently advocate for beneficial policy change. The policy change would prove equitable in giving all students across the state access to the same protection against NIHL in music settings—even in school districts that would otherwise not have the funds for such resources.

While my study is small in nature, I used the research process to analyze the system (or lack thereof) for policy change in S.C. schools. Transformational educational leaders continually look for ways to innovate within the organization (Hallinger, 2003). Innovation, by use of hearing protection, that benefits student health is a win-win for everyone. Educational leaders must continually lead the way for the health of their music students and understanding a system for advocating meaningful policy change is a great way to accomplish that.

There is a moral responsibility for educational leaders to protect students when given information that shows current practices are potentially harmful to a student. After all, a student's best interests are core to the ethics of educational leadership (Stamm et al., 2016). Data protection (Chen & Liu, 2016), school drug policies (Stamm et al., 2016), and evaluating and assessing quality teaching (Reardon, 2016) are three other examples of areas where ethics have been studied recently in education. My study has an ethical component, as well. It is clear in the relevant literature to this study that marching band and other musical classes in public schools produce dangerous and harmful levels of noise. The literature is also clear that students being exposed to these levels of noise can

experience some degree of NIHL. My study provides educational leaders information on a problem that endangers their students' health while primarily studying why or why not that information is useful in affecting policy change.

In summary, my study unveils the roadblocks and lack of a system for advocating policy change in S.C. schools. By researching the relationship between providing information and research on a health risk for students in S.C. music classrooms and educational leaders' perceived ability to help change policy for the benefit of students, my research illuminates policy change challenges and roadblocks. This following section of my paper discusses the potential of this study to effect meaningful change in the areas of practice, research, and policy in S.C. schools.

### **Practice**

James et al. (2020) defined educational leadership practice as “legitimate interaction in an educational institution intended to enhance engagement with the institutional primary task” (p. 618). I believe the primary task of an educational institution is to educate students in a healthy and safe environment. Ensuring the health and safety of these students requires the implementation of certain safeguards. This study highlights a problem of practice that once a risk is known for students in S.C. classrooms, there is no clear path toward policy change. Research is clear that a change of practice in S.C. music classrooms needs to happen to protect student aural health. My study can affect practice in classrooms, such as wearing hearing protection, or the use of a hearing conservation program. More importantly, the practice for advocating policy change was affected by my study. Through highlighting roadblocks educational leaders face when



advocating policy change, my research, as well as potential future research, has the potential to present the needs for policy change and a new system for S.C. educational leaders.

## **Research**

Research is “a systematic investigation designed to make sense of complex, everyday problems that impact your work as a professional educator” (Lochmiller & Lester, 2017, p. 4). Student health and safety in the classroom is an everyday issue for educational leaders. My research helps alleviate an educational leaders’ ability to affect policy change in S.C. classrooms. By illuminating what roadblocks to policy change continue to exist after research and information is given on NIHL in S.C. music classrooms, this research can be retooled to find new ways to combat these roadblocks. Gorard (2005) suggested that educational leaders serve “both as a producer of research itself and as an important conduit for the realistic implementation of evidence-based practices in education” (p. 161). My study produced results for both of those suggestions.

Research, as it guides policy, can be seen more as enlightening the policy maker as opposed to a definitive answer. The policy maker, in turn, must consume and interpret research to make decisions or policy as a solution to a particular problem (Levačić & Glatter, 2001). Policy must be driven by evidence (Thomas, 2011); my study helps provide educational leaders with tools to advocate for policy.

During my time as a masters and doctoral student, I was taught that research and evidence should drive changes in practice and policy. My study not only produces research for educational leaders, but it also provides background knowledge, results, and

suggestions for future researchers. Educational leaders will be able to recreate this study and improve on findings. As I suggested in question three of this paper, recreating this study in a different area of the state or with similar band programs (big/small, rural/urban/suburban) would provide even further insight into what different educational leaders perceive as roadblocks in the way of affecting policy change.

In my experience, South Carolina band directors rarely rely on research as a basis for change. However, the COVID-19 pandemic pushed band directors to use research to inform administrators of what precautions are suggested, what protections are needed, and what limitations exist in band classrooms. Stockman et al. (2021) and their research on aerosols being released while singing and playing wind-instruments was a key piece of evidence that educational leaders needed to alter and continue music activities in schools. Band directors and administrators literally saved band programs by consuming and correctly interpreting research. Now that band directors and other educational leaders better realize the importance of research guiding policy change, I hope my study further illuminates a relationship between consuming research and eliminating roadblocks on the path for policy change in S.C. schools.

### **Policy**

In some suggestions on educational policy, Arar and Örüçü (2021) recommended that “School leaders and teachers are the key actors to ensure a secure environment within challenging school contexts” (p. 2). Policy is the heart of this study. Clearly, a policy change is needed to provide music teachers the resources to protect student hearing and aural health in S.C. music classrooms. My research highlights the roadblocks

are in the way of educational leaders advocating to S.C. lawmakers to change statewide policy that ensures and encourages some form of hearing protection/hearing conservation program in S.C. music classrooms. During the COVID-19 pandemic, research drove policy for how music classes could continue (Anderson, 2023). Some instrument groups needed to be 6 feet apart, some instruments needed to use bell covers, and other groups of musicians needed to wear masks while performing, such as percussion, vocalists, and strings, for example.

The problem of practice for my research is that there is no clear system for policy change or change in practice that is enacted by educators and/or educational leaders. Therefore, my study highlights the perceptions educators have on affecting policy and what roadblocks exist for these educators in affecting policy change. It is my goal to use this research to better establish an accessible and/or supportive system for educators/educational leaders to affect meaningful policy change in education. In turn, I believe this system can empower teachers and/or educational leadership to make policy change in schools and classrooms that benefit students.

## **Conclusion**

In the following sections of my dissertation, I describe my research design and methods for data collection, detail my research findings, and discuss implications for education, policy, and practice. I hope, that with a heightened sense of importance on research, this study can assist band directors and educational leaders to use research to the benefit of their students.

## CHAPTER TWO

### METHODS

The research design of this study is improvement science. As I identified in the previous chapter, improvement science is a methodological framework that guides “scholar-practitioners to define problems, understand how the system produces problems, identify changes to rectify problems, test the efficacy of those changes, and spread the changes (if the change is indeed an improvement)” (Hinnant-Crawford, 2020, p. 1). I believe improvement science is the best method to study the research questions of: What is the perception of educators and educational leaders, specifically upstate S.C. band directors, to affect meaningful policy change. What roadblocks continue to hinder a more positive perception to affect policy change?

My research design reflects Hinnant-Crawford’s (2020) guidelines for improvement science in several key ways. First, I use a problem of practice: there is no clear system of policy change for educators/educational leaders. Second, my research considers a systems-perspective, assessing how systems produce problems. Third, I identify a theory of change to address the problem of practice. Fourth, my research tests the efficacy of the theory of changes by assessing if there is a change in perception by educators/educational leaders on how they can affect policy change. Finally, I assess the scalability and transferability of my theory of change.

In this chapter I discuss the research design for this study, identify and explain the rationale behind the research site to be used in this study, define and describe my positionality, identify and further explain the plan, do, study, act (PDSA) cycle used in

this study, describe methods for data collection, identify participant recruitment strategies I employ, outline the methods used for data analysis and what uses of trustworthiness measures will be used, and what limitations will be present for this study.

### **Research Design**

Within an improvement science design, I used an exploratory sequential mixed methods design for data collection and analysis. Creswell and Creswell (2018) defined exploratory sequential mixed methods as a design as a three-phase design in which “the researcher first begins by exploring with qualitative data and analysis, then builds a feature to be tested (e.g., a new survey, instrument, experimental procedures, a website, or new variable) and tests this feature in a quantitative third phase” (p. 224).

An exploratory sequential mixed methods design worked best for this study as I interviewed a small sample of band directors in upstate S.C. on their perceptions of affecting policy change (qualitative data collection and analysis), developed an informational pamphlet in the form of an infographic and a survey that was distributed to a larger sample of band directors in upstate S.C. (new feature) These surveys and were then distributed, collected, and analyzed (quantitative data collection and analysis). The purpose of this design was to explore with a small sample of band directors so that an instrument (a survey in this study) could be made specifically for the individuals being studied (Creswell & Creswell, 2018, p. 224). This study also utilized the survey-development variant as defined by Creswell and Plano Clark (2018). According to Creswell and Plano -Clark (2018), the survey-development variant uses the initial qualitative stage to form a survey instrument to be distributed to a larger sample.

Again, the research questions in this study are: What is the perception of educators and educational leaders, specifically upstate S.C. band directors, to affect meaningful policy change. What roadblocks continue to hinder a more positive perception to affect policy change? In the following section, I will explore the research site for this study. I will give a brief overview and explore my positionality in selecting this research site.

### **Research Site**

The research site for this study was not a specific school, but a geographic location: upstate South Carolina. Therefore, this was a case study bound by geography. I defined the upstate as the following counties: McCormick, Greenwood, Abbeville, Anderson, Laurens, Oconee, Pickens, Greenville, Spartanburg, Cherokee, and Union. These counties are also recognized as upstate counties by the S.C. government website (sc.gov, 2023).

This site was an ideal location for this study for several reasons. First, for the initial qualitative portion of this study, I used a purposeful sampling approach. According to Creswell and Plano Clark (2018), purposeful sampling is where the researcher selects participants who have experienced “the central phenomenon or key concept being explored in the study” (p. 176). Band directors in schools in Upstate South Carolina (the upstate) were recruited to participate in this study and because the upstate has been my home my entire life, I better understood which band directors had experience in changing or attempting to change educational policy.

Another reason the upstate was an ideal site is the strength of the band directors. This quantitative portion of this study used nonprobabilistic sampling. This form of sampling involves having the researcher select qualified and available individuals to participate and be studied (Creswell & Plano Clark, 2018). The schools in the upstate typically have strong band programs from 6<sup>th</sup> through 12<sup>th</sup> grade, and a big reason for this success is the strength of the band directors. The upstate band programs consistently receive exemplary ratings in marching band, concert band, and in individual events such as region and all-state honor bands (SCBDA, 2023). It was my desire to have high quality educators, who may have experience in affecting policy change, participate in this study.

The bands in the upstate are also large. According to the South Carolina Band Director's Association (SCBDA, 2023), 12 of the largest 24 high schools in the state are from the upstate. These schools range from a student population of 1,962 at Rock Hill High School to a student population of 3,713 at Dorman High School. While student population is not always an indicator of strong participation in the band program, the programs in the upstate do, in fact have strong participation in band programs. I believe band directors with many students who are affected by the NIHL issues I presented to them in this study, were more invested to participate in this research.

The band programs in the upstate are also typically similar. While there are outliers as far as funding, support, facilities, such as James F. Byrnes, Dorman, and Spartanburg High, most schools are similar in how band programs are run in terms of recruiting, rehearsing, performing. I also have seen a similar enthusiasm for band programs across the upstate. For example, students at Greer High School in Greenville

have a similar support system and parental involvement as Seneca High School in Oconee. I believe this is important in studying systems of policy change. If I were to conduct the same study with band programs from the low country, including Charleston, Dorchester, Berkley, I do not believe I would find the support level for band programs or the operation of band programs to be like the upstate programs. The value of this study was specific to upstate band programs, but this study could also be conducted again to focus on a different geographic area, such as the midlands or the low country.

Another reason this site was ideal for this study is the familiarity I have with the potential participants. I have lived in the upstate my entire life, I taught high school band in the upstate for ten years, and I am good friends with many of the band directors here. This familiarity I have with the area helped me greatly given this was the first real research and data collection I have conducted. I do believe if this study proves helpful, I will present my findings to the SCBDA and conduct a similar study in different areas of the state. Both of my sampling methods – purposeful and nonprobabilistic sampling – required that I select participants which I had some background knowledge on. That background knowledge may be the participants’ experiences, qualification, or availability (Creswell & Plano Clark, 2018). My familiarity of this area assisted me in selecting appropriate participants.

### **Positionality**

Positionality is defined by Bukamal (2022) as “a biography that pays particular attention to the context that creates the researcher’s identity, an identity that will affect the way that the social world is seen and understood” (p. 328). From a positionality



standpoint, I am connected to the research site having taught high school band in upstate S.C. for ten years. Bukamal (2022) described this familiarity as being an insider. I am well-connected to the band directors of this area, many of them being my friends and former students. Having taught in the area for as long as I have, and in two of the largest high schools in S.C., I have a unique perspective on the roadblocks to policy change advocacy in S.C. upstate schools. I have personally advocated for change in our schools having spent time working with state legislators and the SCBDA to get bill S.203 passed in the spring of 2018. This bill allowed marching band courses to also count as a student's physical education course. I witnessed and navigated the political arena, as well as garnered support from legislators and community members. Noise levels and student aural health were also a concern in my band program. With over 400 participating members in the James F. Byrnes High band program, noise levels were far beyond the NIOSH recommendations of noise dosage. It is important to me that educational leaders support their band students by changing policy so band programs can supply hearing protection and require schools to use some form of hearing conservation program (limiting noise dosage, sound dampening systems installed, distancing students, etc.). While I believe in that effort, I also personally do not know how I would advocate for such policy change or navigate any potential system or process for policy change. My experience as an educator along with having participated in a state level policy change movement is why I am passionate about helping educators and educational leaders discover an effective way to advocate and enact meaningful policy change.

Being an insider to upstate S.C. band programs does have its disadvantages. For example, a researcher may assume too much and not ask enough during interviews (Brannick & Coghlan, 2007). I had to work to keep myself from assuming or creating blind spots in the data of this study. Another possible problem associated from being an insider would be my colleagues feeling pressured to participate. While I would have liked to use my familiarity with the participants as an encouragement to participate, I did not want participants to feel forced to participate. I did not believe data collected from individuals forced to participate would be as enlightening as data from invested and motivated participants.

### **Improvement Science Design**

I utilized the Plan, Do, Study, Act (PDSA) model used in improvement science (Hinnant-Crawford, 2020). The PDSA cycle can be traced back to Shewart (1939) and, more recently, Shewart and Deming (1986). Shewart (1939) originally redefined the old model of controlling quality from a straight line to a cyclical model that continued improvement over time. More recently, Langley et al. (2009) defined the PDSA as an “efficient trial-and-learning methodology” (pp. 24-25). Essentially, the PDSA cycle is “developing theory, testing that theory, and then revising that theory based on the results of those tests” (Hinnant-Crawford, 2020, p. 153). In this study, the PDSA cycle was relevant as I built a theory as to what may improve perceptions of band directors to affect policy, tested that theory by informing and surveying the participants, and interpreted the results of that data for future studies in educational policy change. Below, I detailed the PDSA cycle for this study.

## **PDSA Cycle**

### ***Plan***

Deming (1994) defined the plan stage of a PDSA cycle as the stage where the researcher develops “a plan for a test, comparison, or experiment” (p. 132). Langley et al. (2009) recommended that the researcher identify an objective, pose questions to be answered, predict answers to those questions, pose a plan to carry out the cycle (who, what, where, when), and create a method for data collection to answer the proposed questions. The planning stage can also be described as defining a change, making predictions about the change, and designing a way to test that change on an appropriate scale (Milder & Lorr, 2018).

Overall, the plan stage provided me the opportunity to strategically organize my study so that fewer roadblocks will be undetected. Specifically, the plan stage served as an opportunity to carefully select the individuals who I initially interviewed, develop the questions I asked, collect information on any gatekeeping or access issues to my participants, and collect contact information for the band directors in upstate S.C.. An estimated timeframe for the plan stage was 2 to 4 weeks after IRB approval.

### ***Do***

Deming (2000) described the “do” phase as the phase where researchers “carry out the test, comparison, or experiment, preferably on a small scale, according to the layout in step 1” (p. 133). There are three major steps in the “do” phase: executing the plan from the planning stage, documenting all aspects of the experiment, and beginning the analysis of the data (Langley et al., 2009). In this study, I initially conducted five

interviews with knowledgeable band directors in upstate S.C.. These interviews served as a chance to better understand what information was needed to be used in my intervention and survey instrument. The end goal of these interviews was to provide qualitative data on the initial perceptions these band directors have on affecting policy change in S.C..

I then analyzed the data of the interviews to then form an intervention in the form of an infographic, for the larger sample of band directors to consume. This infographic document was accompanied by a survey built around the data from the qualitative portion of the study. The information included in the document educated the participants on the roadblocks the initial participants highlighted in their interviews. It was the goal of the informational document to illuminate a clearer path for policy change and empower the participants in their ability to affect change. For example, the interviews highlighted a lack of knowledge on the dangers of NIHL in S.C. classrooms. Another roadblock illuminated by the interviews was inexperience in working with or presenting information to administrators.

After forming and presenting the intervention (informational document), the participants took a survey. The survey collected data on how the intervention changed or did not change the perceptions of the participants' ability to affect policy change. The data collected during this portion of the study was both quantitative and qualitative. The qualitative data collected came from open-ended response questions while the quantitative data was collected through responses using a four-point Likert scale. This "do" stage was consistent with the exploratory sequential mixed methods design I detailed previously. There was an initial qualitative section, an intervention/instrument

formed, in the form of an infographic, using that qualitative data, and quantitative data along with qualitative data collected using that intervention/instrument. The time frame for this portion of the study was 1-2 months.

### ***Study***

During the “study” phase, researchers ask three questions: “Did this go as we expected? Were our predictions close? What happened that was unexpected? What conditions could have influenced our outcome?” (Hinnant-Crawford, 2020, p.169). In the study stage I will do my major analysis of data. The intended improvement in this study is an improvement in band directors’ perception in their ability to affect policy change in S.C. schools.

During this stage, I analyzed the data collected from the surveys to see if there is an improvement in those perceptions to affect policy change in S.C. schools. The goal of the intervention was to improve the perceptions of the participants’ ability to affect policy change by providing information and strategies discovered during the interview portion of the study. In my analysis, the data showed whether the intervention had any effect on the participants’ perceptions. I predicted the intervention will improve the participants’ perceptions, but this phase helped me answer if my prediction was correct. This stage also provided me an opportunity to discover any unexpected results. An example was if perceptions were worsened by the intervention. Lastly, this stage proved me an opportunity to discover any conditions that affected the results. For example, participation was low due to the time of year I am collecting data. Band directors were

less apt to respond to a survey at the end of the school year and in the beginning of summer, for instance.

### *Act*

The final phase of the PDSA cycle is the “act” phase. This phase differs from the typical implications section from a study. A PDSA cycle typically ends with five actions: adopt, adapt, expand, abandon, or test again under other conditions (Hinnant-Crawford, 2020). Essentially, this phase is where the researcher determines what the study discovered and decide what to do next (Milder & Lorr, 2018, Speroff & O’Connor, 2004).

During this phase, I used the information discovered in the study phase and formed recommendations for what is next. If the study proved helpful and improves, even slightly, the perceptions the participants have on affecting policy change, I would like to test this study again in a different region of the state. For example, I would conduct a similar study with band directors in the middle part of the state and again with the lower part of S.C.. Multiple PDSA cycles would allow me to discover differences in the participants’ perceptions in various geographic regions.

On a larger scale, I would like to use the results of this study to expand and present the findings at the South Carolina Music Educators Convention (SCMEA) and collect data from music educators across the state—not just band directors in a particular region. Strings teachers and choir directors may have different perceptions on their ability to affect policy change, and that data can further expand this research.

## **Data Collection**

I used an exploratory mixed methods design for my improvement science study. The data collection portion of this study took a month for the interviews and another month for the surveys. The overall study took me nearly a year; however, there were some challenges in my professional life that significantly extended this timeline. A future PDSA cycle would take two to three months if I were able to solely devote my time to the study. The types of data collected will be both qualitative and quantitative. Interviews will provide the initial qualitative data and will help form an intervention and an instrument to collect quantitative data later in the study. The location for data collection will be limited to upstate S.C..

There were two waves of data collection. The first was conducted interviews with five participants. These interviews assessed what information was needed to accompany the surveys sent out during the do phase. Identifying common themes and responses assisted me in what information was included in the infographic that was disseminated along with the survey. The data was collected through asking a series of questions (Appendix A) about the participants perceptions of their ability to advocate and/or affect meaningful policy change in schools/classrooms. I used Zoom for these interviews for future use during my analysis stage. During the second wave of data collection, an intervention in the form of an infographic was distributed along with a survey for participants to complete.

## *Interviews*

Qualitative interviews “involve unstructured and generally open-ended questions that are few in number and intended to elicit views and opinions from the participants” (Creswell & Creswell, 2018, p. 187). My data collection began by setting up five, 30-minute interviews to assess what information was most helpful for the participating band directors. Interviews were recorded and transcribed digitally. I cleaned up the data after the transcriptions are generated by the cloud version of Zoom. (See Appendix A for interview guides).

In short, the rationale for conducting these interviews was to better understand what research information would be more helpful for the participants. I suspected the interviews would show me that the participants did not have an extensive knowledge of NIHL risks in music classrooms. I also wanted to see relationship issues the participants had with school and district leadership. If the participants could benefit more from information on working with school and district leadership, I wanted to make sure that research information was present in my materials for the do phase of the study.

I predicted the roadblocks identified would be monetary support, lack of voice or being heard at higher levels (district/state) of education, and a concern for political blowback from individuals who understand the problem of NIHL risks in S.C. music classrooms but wish to change nothing. To consider this study an improvement, I identified roadblocks (challenges impeding progress) to policy change in S.C. music classrooms and collected data on whether or not presenting information on these roadblocks was effective in raising the participants’ perceptions to affect policy change in



S.C. schools. This study can be used to further develop a system teachers and educational leaders can use to affect needed policy changes in S.C. schools.

### *Surveys*

After the interviews I collected data through surveys of band directors in upstate S.C.. I used survey design because “Survey research provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population” (Creswell & Creswell, 2018, p. 12). According to the S.C. Government website (sc.gov), upstate S.C. is defined as the following counties: McCormick, Greenwood, Abbeville, Anderson, Laurens, Oconee, Pickens, Greenville, Spartanburg, Cherokee, and Union. This sample of band directors was representative of similar counties, school districts, and band programs in S.C.. The survey was comprised of 29 questions and took approximately 10-15 minutes to complete. The survey was distributed using Qualtrics and utilized open and closed ended questions. The closed ended questions gauged the participants perception of their ability to affect meaningful change before and after the intervention, and the open-ended questions provided the participants the opportunity to give feedback on what was particularly helpful in the intervention along with what information the participants believed would prove helpful but was not included in the survey.

The survey asked questions on to determine what perception the participants have in affecting meaningful policy change in S.C. public schools (see Appendix B). Questions also attempted to discover what, if any, effect the infographic had on the participants’ perception to affect policy change. Open ended questions gave the

participants a further opportunity to comment on what the infographic provided that was helpful and what areas the infographic could be improved in the future.

First, I presented the information on NIHL risks in music classrooms that has been studied and the known benefits for using hearing protection for music students in music programs. I planned to make an easily accessible presentation of this information so that band directors do not have to sift through convoluted terms and research. However, I also made all research and data available in an attached file, in the form of an infographic, so that band directors could read in depth and/or present this information to their school and/or district level administration. Following the band directors reading the information I supplied them with, I then surveyed the band directors on their ability to affect policy change given what information they were just supplied with. Data from the surveys identified what benefits the research, from the infographic, provided the participants when advocating for policy change. Data also provided more insight on what roadblocks to policy change still exist. It was the purpose of this study to highlight what a system for educational leaders to affect policy change may look like.

### ***Participant Recruitment***

According to Creswell and Creswell (2018) studies aim to recruit a sample of participants with similar traits. In this study, the participants were all band directors and were all from upstate S.C.. This provided the study with a sample of participants with similar teaching backgrounds in a close geographic region. This was important for the study because the data has the best potential to have common themes or threads.

Participants were recruited through email. Emails to a targeted group of participants is a common recruiting strategy in studies (Creswell & Creswell, 2018).

After the approval from Clemson's IRB, I reached out to five upstate S.C. band directors to interview for the first data collection portion of the study. Fortunately, four of the five band directors responded quickly and were eager to participate. The final band director did not respond after multiple attempts to communicate, but I was able to secure a fifth participant quickly following that failed communication. That final participant became High School Band Director C (see Table 2.1). The participants are teaching band in Pickens County, Greenville County, Spartanburg County, and York County. All five participants were well-established band directors who had been at their current position for at least five years. I felt it was important to first interview teachers who may have background knowledge on affecting policy change and who may have experience changing policy. This information would be particularly important in the survey as the survey was sent to band directors of all experience levels (first year teachers all the way to near retirees).

I then set up and conducted interviews with all five participants. These interviews ranged in length from 27 minutes to 61 minutes from start to finish. After the interviews were complete, I utilized the transcription feature in Zoom to form initial transcripts. These transcripts were then cleaned and redacted. The participants named were coded as: High School Band Director A, High School Band Director B, High School Band Director C, Middle School Band Director A, and Middle School Band Director B (see Table 2.1).

High School Band Director A has over 30 years of teaching experience at multiple schools and is currently serving at a small rural school in upstate S.C.. High School Band Director B has over 25 years of teaching experience and has served at their current post for more than a decade. High School Band Director C is serving at a recently opened high school in upstate S.C. and has over 10 years of experience. Middle School Band Director A has over 30 years of teaching experience and has served that their current position for over 15 years. Middle School Band Director B is currently serving in a small rural school in upstate S.C. and has served there for nearly 20 years (see Table 2.1).

**Table 2.1**

*Interview Participants and Their Pseudonyms*

<b>Participant Pseudonym</b>	<b>Band Level</b>	<b>Years of Experience</b>
<b>High School Band Director A</b>	High School	30+
<b>High School Band Director B</b>	High School	25+
<b>High School Band Director C</b>	High School	10+
<b>Middle School Band Director A</b>	Middle School	30+
<b>Middle School Band Director B</b>	Middle School	20+

Table 2.2

*Survey Participants' Locations and Band Levels*

<b>Location</b>	<b>Participant Count</b>	<b>Band Levels</b>
<b>Anderson</b>	6	Elementary, Middle, High School
<b>Abbeville</b>	1	Middle, High School
<b>Cherokee</b>	2	Middle, High School
<b>Greenville</b>	6	Middle, High School
<b>Greenwood</b>	3	Middle, High School
<b>Laurens</b>	5	Intermediate, Middle, High School
<b>Oconee</b>	2	Middle, High School
<b>Pickens</b>	7	Middle, High School
<b>Spartanburg</b>	16	Elementary, Intermediate, Middle, High School
<b>Union</b>	1	Middle School
<b>York</b>	4	Middle, High School

It was my belief that if I assured my colleagues that participation in my study will not involve too much time or effort, participation would be high. Fortunately, I was able to recruit my five interview participants without any difficulty. I was also able to recruit 53 survey participants. See Table 2.1 for a breakdown of the pseudonyms, band levels,

and years of experience of the interview participants (see Table 2.1). See Table 2.2 for a breakdown of the survey participants' locations and band level (see Table 2.2).

## **Methods of Data Analysis**

### ***Interviews***

As Creswell and Poth (2018) recommended, the analysis stage involves “organizing the data, conducting a preliminary read-through of the database, coding and organizing themes, and forming an interpretation of them” (p. 181). After digitally transcribing and cleaning the data from the interviews, I organized the data using the software NVivo so that I could easily look for codes within the data. As recommended by Creswell and Poth (2018), I utilized lean coding and attempted to look for 5-6 categories. As I continued to review the interview data, I finalized a list of codes or categories to use in my codebook (Creswell & Poth, 2018). A codebook will ideally contain the name for the code and, if necessary, a shortened label suitable to apply in a margin. Description of the code defining boundaries through use of inclusion and exclusion criteria. Example(s) of the code using data from the study to illustrate (Creswell & Poth, 2018, pp. 190-191). The codes I used were for the following themes: knowledge of the problem (in this case, NIHL), relationships with administration, experience in a policy change movement, teaching experience, school leadership experience, district-level fine arts support, and roadblocks.

Once the interview data was coded, I assessed the data and compared the findings to my initial hypotheses of what categories or themes will be present. I anticipated there to be common themes like the suggestions from Weible et al. (2012)—misunderstanding

or apprehension to political situations, a lack of deep understanding on the risks of NIHL in music classrooms, a lack of understanding of how and when to communicate with administrators and decision makers, and too little time spent in the current their current political subsystem. My hypothesis on which themes would be present in the interview transcripts was nearly 100% correct. The participants, however, did not discuss the political issues when attempting to affect policy change as much as I predicted.

### *Surveys*

After coding my data and sorting the interview data into a data matrix (Miles et al, 2020), I analyzed what information in each theme would be helpful in the intervention. Survey data was collected after the intervention, in the form of an infographic (Appendix C), was distributed. The infographic was five easy to read slides with information from each of the 8 themes/codes (Appendix C). This infographic was emailed to the participants as a PDF accompanying the link to the survey. The information in the infographic was useful resources to counter the roadblocks the interview participants indicated were hindering their perceptions to affect meaningful policy change in public schools. I will detail the information in the infographic more later in the next chapter. After creating and editing the infographic, I created a survey to send to the participants (Appendix B). After working with members of my committee to edit and improve my survey, I sent it to every band director in upstate S.C. in the form of an email. The email contained the link to the survey and the infographic was attached to the email for band directors to read while taking the survey. Below I will discuss the findings from both the

interviews and surveys broken down into the major themes/codes that were discovered during the first round of data collection.

There were 53 survey participants. I then checked for response bias by using a respondent-nonrespondent check for bias. This bias check involved me contacting a few nonrespondents by phone to see if their answers would have been significantly different from the results (Creswell & Creswell, 2018). I contacted 10 nonrespondents and none of them indicated their answers would have been significantly different than the results. Five of these nonrespondents were middle school band directors and five of them were high school band directors. All the contacted nonrespondents were in the upstate of S.C. I then supplied a descriptive analysis of the data. I analyzed the closed-ended data using the program JMP to see what effect the infographic document had on the participants' perception of being able to affect policy change. JMP gave me a better visual representation of what the data did or did not show (Creswell & Creswell, 2018). JMP also provided means, standard deviations, score ranges, etc. for the responses. The open-ended data from the surveys was combined with the interview data to show the differences between the initial sample of participants and the second sample of participants. I was looking for what changes may have been made in the participants' perceptions from the initial interviews and the survey.

### ***Validity or Trustworthiness Measures***

The first validity measure I employed was data triangulation. I used the data collected during the interviews along with the data collected from the surveys to corroborate the themes found from both data sources. Creswell and Poth (2018)



recommended using multiple data sources to “shed light on a theme or perspective” (p. 260). I believed the interviews should have relatively common themes; however, vastly different answers may have indicated that my questions are not specific enough or my sample of band directors come from vastly different educational backgrounds or situations. When collecting the interview data, I made sure to interview each band director equally using the same tone or inflection in questions along with attempting to interview each one in the least stressful setting possible.

Another validity measure I employed in this study was using reflexivity. Creswell and Poth (2018) suggested that the researcher should disclose experiences and perspectives that may affect the position the researcher has on the subject being studied. This reflexivity or bias disclosure will help the reader better understand my position as a music educator, as well as an educational leader. As I have stated before, I have over a decade of experience of being a music educator, but I have also had the privilege of studying and engaging with school and district level leadership. I believe my experiences give me a unique perspective on what I perceive the roadblocks are to influencing policy change in education.

Member checking is described as “the most crucial technique for establishing credibility” (Lincoln & Guba, 1985, p. 314). Bringing back the findings to my original group of interviewees after collecting survey data helped further validate the findings. I had High School Band Director A and Middle School Band Director A from the initial interviews review the survey findings. Once those participants reviewed the findings, I

had them send me their reactions. Their reactions were that the survey data was unsurprising and in line with that they predicted (Creswell & Miller, 2000).

A final validity measure I believed would benefit this study was the use of peer review. My peers at the university, along with my professors and recent graduates, provided a reader's lens to my writing. Reviewers provided feedback that helped me see my writing and this study from a different point of view (Creswell & Poth, 2018).

### ***Framework for Influencing Policy***

While the data I collected was be on educators' perceptions of being able to affect meaningful policy change, the framework for my data collection and data analysis was based in established literature on influencing policy change. Influencing policy change can be seen in various professions and/or disciplines. In the public health sector, a method that has been used to influence policy change is to provide individuals with training and experiential learning through political advocacy, community mobilization, and media engagement (Morris et al., 2019). Another area in which research on influencing policy change exists is in climate change. Clark and Crawford (2012) studied if a corporation's performance influenced the level of political activity (to affect policy decisions) that company participated in on climate change policy changes.

While there are many other areas and disciplines that policy influence research exists, the common factor in the research I have read is the political arena. Weible et al. (2012) suggested there are three overarching strategies of influencing policy change. The first is gaining a deep knowledge of the analytics of the current policy and the science behind a proposed policy change along with a deep knowledge of the micro and macro-

level subsystems. For example, how policy affects (or how a policy change may affect) individuals or organizations at both the local and surrounding levels.

The second strategy Weible et al. (2012) suggested was building networks. Influencing policy change involves interacting with others and building a network of contacts in which either ideas or resources can be shared or exchanged. The third strategy suggested was participating for a long period of time in whatever subsystem you are attempting to influence policy change upon. The authors suggested that influencing meaningful policy change can often take long periods of time and individuals should use that time to further develop knowledge of that subsystem.

I believe one of the most important points Weible et al. (2012) made, in relation to education and educational leaders influencing policy change, is that it often takes time (often a decade or more) for data and research to reach decision makers' eyes. My hypothesis was that educational leaders have little to no knowledge on NIHL risks in music classrooms and decision makers have not been approached about any form of policy change. The other point the authors suggested that related to education was that there is a window of opportunity for influencing change. While data and research may present a need for change, the timing may not be right. My hypothesis was that the educators I will be interviewing will indicate that timing in speaking with the administration of their school/district is important in attempting to influence or affect policy change.

### ***Limitations***

There were several limitations present in this study. The first is that I only studied band directors from around a third of South Carolina. This is a small sample size comparative to the amount of band directors in S.C. and in the nation. My results are only able to be generalized to S.C. band directors from the Upstate region of S.C.. Further studies will be needed to generalize findings to the whole of S.C., different regions of S.C., or larger areas such as the Southeast or the nation.

Another limitation to this study was the timeline by which data is collected. My colleagues are extraordinarily busy individuals who had performances and other commitments well into May of the school year. I predicted I had to be a little persistent to get appointments for the original interview group and with the survey data collection that follows. This prediction proved to be correct when collecting the data for this study. Getting time for interviews and getting responses to the survey took some finesse and perseverance, but the efforts were worth it by the end of this study.

There were two other challenges during data collection. The first challenge was during the interview process. While the interviews were straightforward and easy once they were scheduled, finding a common time for teachers on differing schedules was tough. I found that scheduling during lunch or during planning breaks had one set of challenges in that the interviews could go longer than the anticipated length and teachers must return to teaching before the interview would be complete. Another challenge was during the second round of data collection. With the timing of sending out the intervention and survey, many teachers were beginning their summer break. While I

believe the timing of this improved my response rate, the timing of responses was slowed. I believe that once teachers had dismissed for break, many of them were checking email less frequently. In turn, however, when teachers did notice my emails, they responded with a higher rate of response than I believe they would have had they gotten my survey during the busiest time of the semester (usually mid-March through graduations).

## CHAPTER THREE

### FINDINGS

In this chapter, I discuss the findings of my study, including my implementation journey, presentation of the data I collected, patterns and themes I discovered, my theory of improvement, and what a future PDSA cycle will look like for this research. This chapter is mostly a reflection of what happened during the “do” and “study” portions of the PDSA cycle. As a refresher from my previous chapter, Deming (2000) described the “do” phase as the phase where researchers “carry out the test, comparison, or experiment, preferably on a small scale, according to the layout in step 1” (p. 133). Hinnant-Crawford (2020) defined the “study” portion of the PDSA cycle as asking these three questions “Did this go as we expected? Were our predictions close? What happened that was unexpected? What conditions could have influenced our outcome?” (Hinnant-Crawford, 2020, p.169). This chapter will discuss the findings of this study and begin to answer the above questions.

The research questions for this study are: What is the perception of educators and educational leaders, specifically upstate S.C. band directors, to affect meaningful policy change? What roadblocks continue to hinder a more positive perception to affect policy change?

The major themes found in this study were a knowledge of the problem, the role of leadership, perception on the ability to affect policy change, experience in a policy change movement, and the roadblocks present when advocating for policy change. The central theme in my findings was that improving educators’ perception on their ability to

affect policy change cannot be quickly achieved. Multiple themes discovered in the data collection show that the key roadblocks/challenges to the goal of improving the perception to affect policy change are not quickly overcome and will take time. However, understanding the data and knowing what steps educators can take toward affecting meaningful policy change will improve their abilities and perceptions regardless of how long it may take.

### **Knowledge of the Problem (NIHL)**

As a brief reminder, this study is using the problem of students being exposed to the risks of Noise Induced Hearing Loss (NIHL) in music classrooms as an example of a problem that policy change may benefit students. When asked about what NIHL knowledge the participants had, Middle School Band Director B responded with “None that none that comes to mind.” The first of the findings was that the participants had some to little knowledge on NIHL. Middle School Band Director A even indicated band directors may not have the time to read or digest research on NIHL. For example, Middle School Band Director A stated, “I don’t think it’s on a lot of music educators’ radar daily, because we have so many things to handle already.” Even furthering that discussion, nearly all participants indicated that should they want to explore something like a policy change to help prevent NIHL in their classrooms, they would need to have much more data on how NIHL is a problem and how it affects students. This is one of the roadblocks I identified so there is a bit of a crossover with this theme and the “roadblocks” theme.

The surveys showed that the participants had a similar knowledge level as the interviewees. When asked three questions about what background knowledge participants

had in NIHL overall, NIHL and its effects on students, and NIHL in music classrooms, the participants overwhelmingly responded with having little to some knowledge to all three questions. Using JMP, I created the following distribution tables for these three questions on NIHL (Figure 3.1).



**Figure 3.1**

*Background Knowledge on NIHL by Survey Participants*

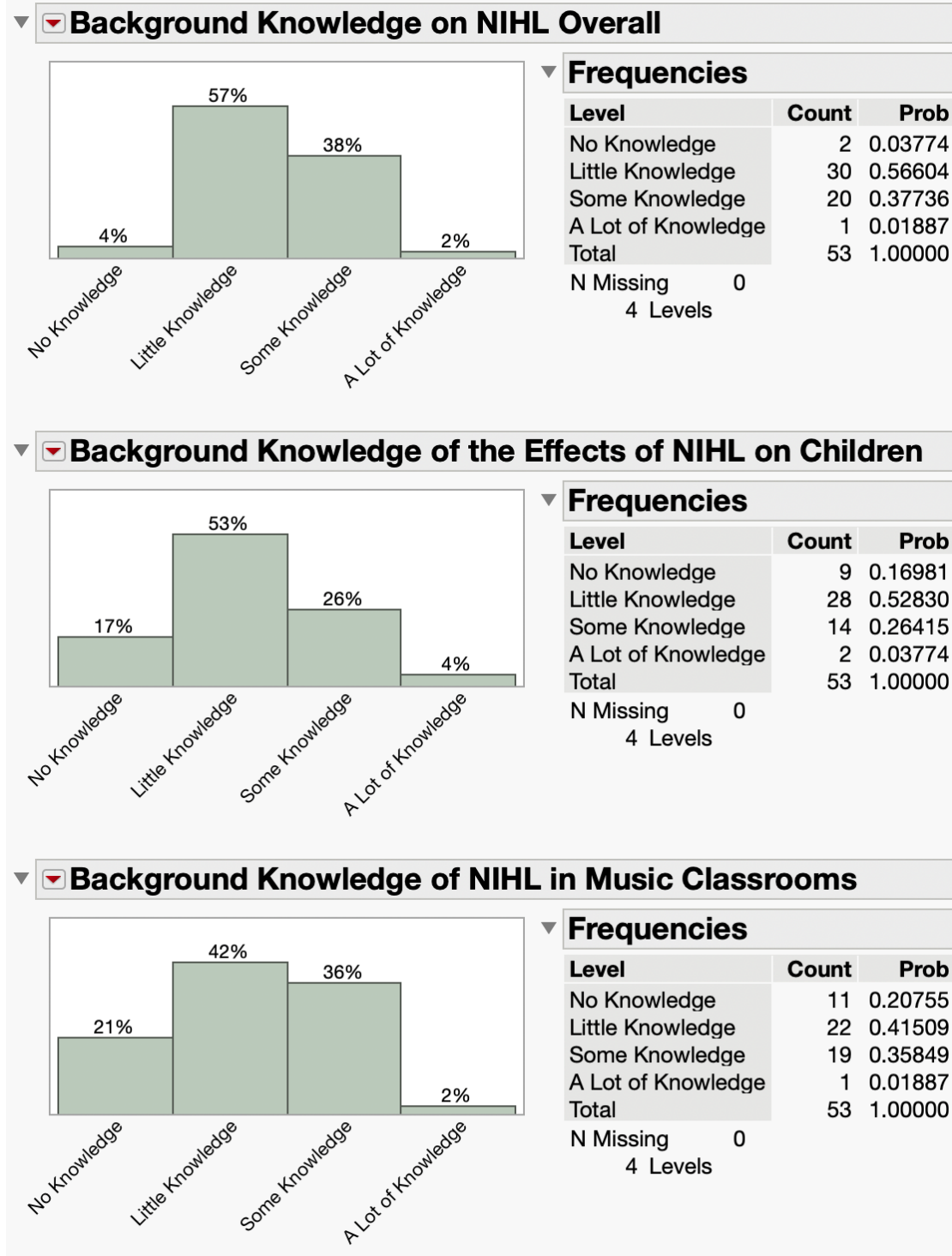


Figure 3.1 shows the percentage of the participants' responses on their background knowledge of NIHL. A majority showed to have little to some knowledge of NIHL overall, the effects of NIHL on children, and the presence of NIHL risks in music classrooms.

Beyond these three questions on background knowledge, survey participants were asked what other information on NIHL would be helpful for them should they want to pursue a policy change to help reduce or eliminate the risks of NIHL in their classrooms. Many indicated wanting more information on the actual decibel readings of classrooms. One stated, "It would be useful to collect data from decibel levels in our classrooms. Everyone has different instrumentation, number of students, and classroom sound dampening." Another participant asked for "...specifics in data." For example, something like "switching from tile to carpet decreases sound by X percent" or "in X size space it is recommended to have X many sound panels." While I agree that this information and research would be helpful for band directors in a policy change effort, this level of audiology research is beyond the scope of this study. Another participant suggested that an additional infographic solely on NIHL data separate from policy change advocacy recommendations would be helpful.

The infographic provided me with more knowledge of NIHL than what I had prior to reading it. However, I think that an even more detailed infographic that focused solely on NIHL data (instead of NIHL + Policy Change + relationships with administrators) could be helpful to present to stakeholders to pursue policy change.

While this study is discovering the perceptions band directors have on their ability to affect policy change, a follow-up study with more information solely on NIHL may be beneficial for the band directors who participated in this study.

The survey also asked how effective the information included in the infographic was at raising the participants' knowledge of NIHL. 47% of the participants indicated the information was at least somewhat effective in improving their knowledge of NIHL, while 47% found it to be highly effective, and 6% indicated it was somewhat ineffective (Figure 3.2).

**Figure 3.2**

*NIHL Information Effectiveness*

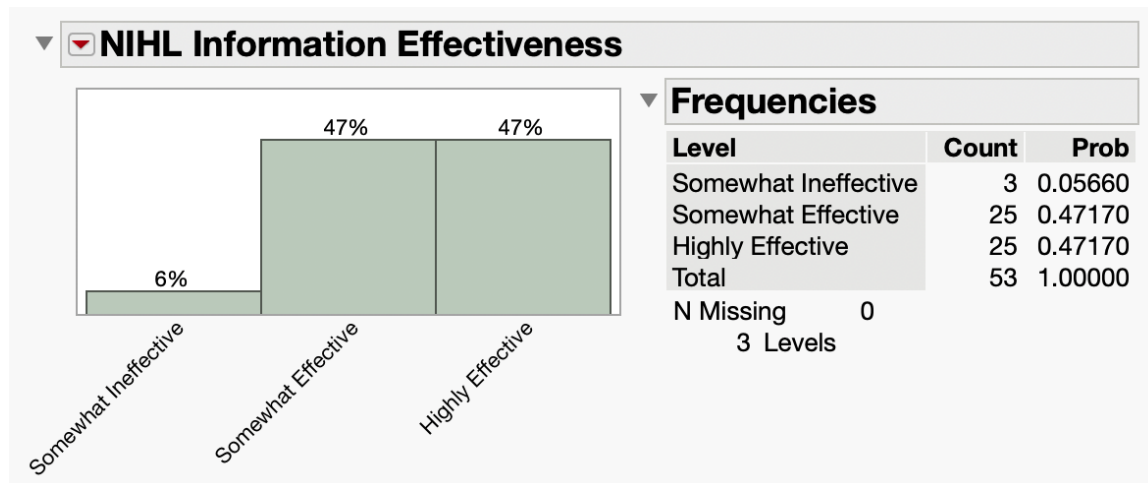


Figure 3.2 shows the participants' perceptions on how effective the information on NIHL was in the infographic. Most of the participants indicated that the information was somewhat to highly effective.

In summary, the participants indicated that a majority has little to some knowledge of NIHL prior to participating in this study. The participants also indicated

that the infographic was somewhat to highly effective in presenting information on NIHL.

### **Role of Leadership**

One of the major themes was the role of leadership and its impact on the participants' perceptions of their ability to affect policy change. There were multiple sub-themes within the role of leadership. School leadership experience, teaching experience, and district level fine arts support and administration were the sub-themes that composed the overall theme of the role of leadership.

#### ***School Leadership Experience***

Several of the interviewees indicated that having some school leadership experience had positively affected their perception to affect policy change in public schools. These school leadership roles included serving on homecoming committees, serving as lead teacher for the band directors, serving as the director of bands for a school district, organizing and directing the school pageants, organizing school-wide fundraisers, and serving on the school's athletics committee. The participants indicated that these leadership roles had a positive impact on their ability to affect policy change because it gave them further insight into the inner workings of how the school functions. One participant indicated that being the role of band director inherently has some school leadership responsibilities built in. High School Band Director A stated, "At High School B, I was basically over 1,300 students and 12 full time staff as the director of bands. That's bigger than some schools. I oversaw coordinating recruitment efforts, fundraising

efforts, transportation efforts, etc.” It is important to understand that simply being in the role of band director can be a leadership role in and of itself.

While school leadership experience can vary in degree, I included encouragement to participate in school leadership roles as they come—no matter how small. Survey participants were asked if they had any school leadership experience. If the participant responded with “yes,” the participant was asked how a school leadership role affected their perception to affect policy change. If the participant responded “no,” the participant was asked how the school leadership information in the infographic had affected the participant’s ability to affect policy change.

One participant echoed that school leadership roles have a positive effect on one’s ability to affect policy change.

I have served as our fine arts department chairperson, chairperson of the School Improvement Council, and in other school leadership positions through the years. I absolutely believe that experiences like those have given me a positive perception towards my own abilities to affect change. I have seen how those in school leadership value input from others and how that input really does shape changes.

I believe the above quote is a great example of a band director gaining confidence to affect policy change because they have been more involved through leadership roles.

Another participant indicated that having a school leadership role gives insight into what might need to be brought to administrators. “I am a teacher leader within my building and by having conversations with my colleagues I can gauge policy

effectiveness, and then use that to talk to administrators.” One participant echoed the interviewees in that having a school leadership role gives more insight into what is happening outside of one classroom.

The best thing about these experiences is getting a bigger picture of the school community outside of our purview in the band room. Because of this, I'm more able to understand how to connect issues across the campus and affect more students.

In my experience, having that “big picture” perspective is key in affecting policy change. Administrators have been more apt to listen to my ideas the more I consider the effect a change may have on all stakeholders in the community.

One survey participant echoed an interviewee in that band directors inherently have some form of school leadership as a responsibility.

I have served in a leadership capacity at many of my schools, but I do believe that specifically being a band director puts a semblance of school-leadership on your plate. I think that the infographic adequately expresses how necessary it is for music educators to be leaders for policy change regardless of their in-school leadership opportunities.

This is spot on, in my experience. When I was serving as a band director at a James F. Byrnes High School, we had nearly 450 band members throughout the year. That number of students is bigger than some schools in the area. We had to function almost like a school within the school.

While many of the participants indicated that they had some experience with a school leadership role, some indicated the infographic encouraged them to investigate a role soon. One participant stated, “I do not have any prior school leadership experience, but I am encouraged to start getting some in order to help make the change I want to see.” Another participant indicated the infographic encouraged them to try to affect change in the future even if it is not for a groundbreaking policy change. I do not have prior school leadership experience. “The infographic inspires me to believe that I can still make a difference even if it is just something small!” In my experience, starting with affecting small policy change opens so many opportunities for teachers the affect bigger policy change in future.

### ***Teaching Experience***

Another common theme among the interviews was that as a teacher gains years of experience, the teacher gains more confidence in their ability to affect policy change. All the interviewees indicated that they feel more confident as veteran band directors in affecting change. High School Band Director B stated, “I’m a lot more comfortable now, going to my principal and going, ‘Hey, this policy is not working, do you mind if I come up with some ideas of how to make this better?’ I feel a lot more comfortable than I would say I did 25 years ago.” High School Band Director C indicated, “At this point, I’m a pretty bold person. I don’t have much to lose at this point in time.” These quotes show how confidence in affecting policy change increases over time. The more experience a band director has, the more likely they have enough confidence to affect policy change.

Using this data, I asked the survey participants if they have also felt an increase in confidence for advocating for policy change as they have gained years of experience. Several participants indicated having more experience does positively impact their perception to affect policy change. One participant indicated that, as a young teacher, you are solely focused on the present and not thinking about the bigger picture. “Firstly, you gain more knowledge about the profession and can see the whole picture clearer. At the beginning of your career, you focus on simply what you need now and rarely ask why or how this impacts others.” Another participant stated that communication skills improve with experience. “The more experience you receive, the better you learn to talk and approach the ones that control the changes necessary to your field.” One participant indicated that experience gives perspective and even political capital for a policy change request to be taken seriously.

Experience helps in determining what kinds of requests will be considered and how they should be presented. Accompanying this is experiences with different administrative groups-both building and district. Most of us with a few years have worked for different principals, APs, etc. Every one of them requires a different approach. Experience gives you the ability to figure out how to approach and present these types of situations. Also, the accumulation and use of political capital can be helpful. This can be done in various ways. Volunteering for extra duties, not bothering admin with trivial concerns, maintaining professional behaviors (be on time, meet deadlines, be organized, submit professional reports, etc.). These characteristics will lead to admin taking a request more seriously.



In summary, teaching experience was a large factor in how positive a participant's perspective was on their ability to affect policy change.

### ***District-Level Fine Arts Support and Administration***

The last of the major themes/codes was the presence of district-level fine arts support. This may come in the form of a fine arts coordinator or a similar role in the district office. Many of the interviewees indicated that their school districts/counties had some form of this support. One participant indicated their district has a district-wide fine arts advisory council that reports the needs to the district office while the others indicated they had a county or district-wide fine arts coordinator.

Middle School Band Director B indicated that having a fine arts coordinator positively affected their ability to influence policy change by providing the participant with guidance and a roadmap for navigating how to approach policy change.

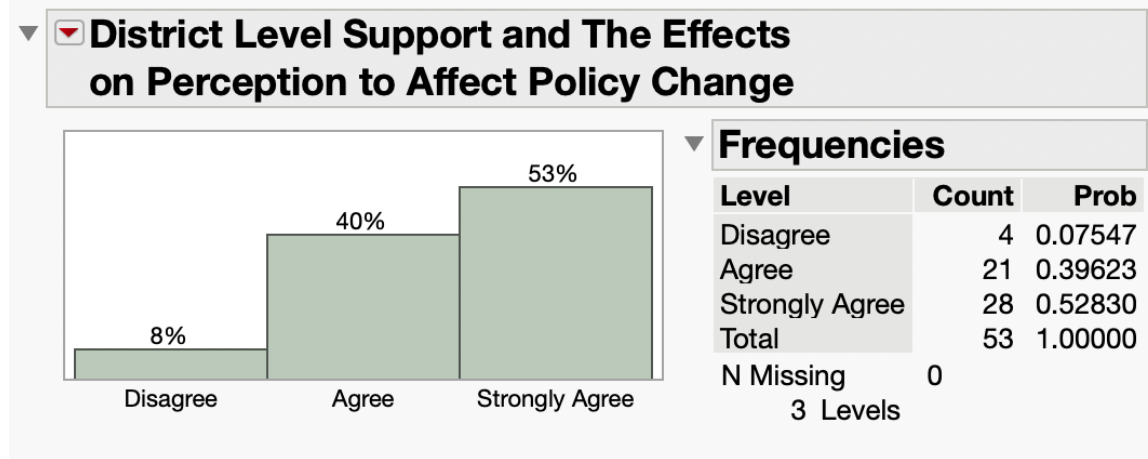
I talk to Fine Arts Coordinator C quite often, and if I go to him first, he will then direct me. 'Hey, don't do this, or you have to talk to your principal or someone on the district level.' So, having a Fine Arts Coordinator, and one that is a band director is very beneficial.

In the survey, I wanted to explore whether having a district-level fine arts coordinator or someone in a similar role positively affected the participants' perception to affect policy change. The participants were asked to answer a question asking if they felt having this district-level support affected their perceptions. The data showed an overwhelming majority of the participants stating that having district-level fine arts support affects their perception to affect policy change. 40% of the participants agreed

that having district-level fine arts support is beneficial, 53% strongly agreed, and 8% disagreed (Figure 3.2).

**Figure 3.2**

*District-Level Support and The Effects on Perception to Affect Policy Change*



### Relationships With School and/or District Administration

Another theme that was discussed at length with all the interviewees was the importance of a relationship with administrators. The data showed that forming a strong and healthy relationship not only raises the perception to affect policy change, but also eliminates a potential roadblock to affecting policy change in the future. All the interviews included a question on the frequency with which the participants interacted with school and/or district leadership/administration. All participants indicated they interact with administrators early every day in some way. Middle School Band Director B stated that they interact with administrators multiple times a day.

I interact with leadership several times a day. I do morning duty for 40 min with my eighth-grade assistant principal. My principal, she doesn't bother calling my

office phone anymore. She calls me on my cell phone because I'm all over the building and we're friends, she goes on our Florida trip with us for 5 days with the band because she wants to go, and I communicate with Fine Arts Coordinator B through email once a week.

In my experience, this is a great way to build a trusting and positive relationship with administrators. I would often catch up with my principals and assistant principals while on duty or in passing after school hours. We got to know each other more both professionally and personally.

One key point I found in all the interviews is that the participants emphasized the need to communicate with leadership and/or administrators about non-educational subjects at times. For example, leadership should ask staff about their day, get to know them as a person, and show that they care about them outside of just "needing stuff".

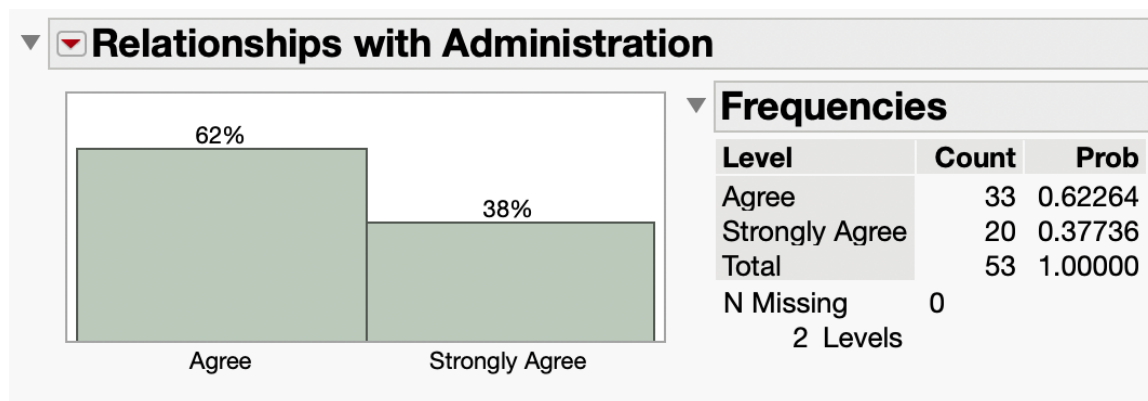
Another point the interviewees emphasized in building a relationship with administrators is one's approach when bringing issues. One participant indicated that you cannot come in, in "attack" mode but rather a collected and professional approach will get you some earned and mutual respect with the administration. Another participant indicated a similar point in that you cannot approach admin as is the current way is poor. The administrators may have been a part of forming the current policy or may be partial to the current way things are done.

The survey data indicated that the participants found the information included in the infographic to be helpful. All participants indicated that the information on relationships with administration helped them understand how to engage with

administrators in ways that can meaningfully affect policy change. 62% of the participants indicated that they “agreed” and 38% of the participants indicated they “strongly agreed” that the included information in the infographic was helpful (Figure 3.3).

**Figure 3.3**

*Relationship with Administration*



From an open-ended question on how to further build positive relationships with administration, one participant indicated it is important to know the protocol for moving through the chain of command. “The information is great. The only thing I can think might be added is explaining protocol—for example, approaching building administration before going to make an appointment with the superintendent.” In my experience, this is a vital point in building a strong and trusting relationship with administrators. I always followed the chain of command (in my experience it was assistant principal, principal, deputy superintendent, superintendent), and I was rewarded with strong relationships with all my administrators. My perception was that principals do not appreciate someone

going over their heads or around them when the admin does not give the answer a teacher is looking for.

Another participant wanted to emphasize the importance of building relationships with admin and the effect it will have on policy change movements. “This is a huge point to stress. I often hit huge roadblocks with my admin that makes it feel impossible to affect policies beyond them. Having their support would make all the difference but often admin is the first obstacle.” Another participant echoed this sentiment by stating, “When you feel safe to speak your mind with your administration, you’re more likely to advocate for the change you want to see!”

In summary, school leadership experience, teaching experience, district-level support, and relationships with administrators are all large contributing factors in the band directors’ perceptions to affect policy change. The more positive experiences the participants had with school leadership roles, the longer the participants had been teaching, the level of district support, and a positive relationship with administrators were shown to be important in a positive perception to affect policy change.

### **Perception on Ability to Affect Policy Change**

One major theme was band directors’ perceptions on their ability to affect policy change. Several of the interviewees indicated that you must be persistent and proactive in bringing policy change ideas to administrators. High School Band Director A had a rather direct way of looking at it.

It’s not very often that I hear an administrator, or a district level person go, ‘Hey guys, what’s the input that you have of some ways we can make things better?’

It's rare to get that from admin. Sometimes you have to kind of almost be a salesman and get your foot in the door and shove your ideas down their throat to get to be heard sometimes.

While that approach may work in some scenarios, High School Band Director C indicated that a different approach of bringing ideas to a principal has improved their perception of affecting policy change. "I'm comfortable going to my principal and going, 'Hey, this policy is not working, do you mind if I come up with some ideas of how to make this better?'" Showing interest in forming solutions to a problem may be a more effective approach than forcing ideas on administrators.

When forming the surveys I included these success stories on how the interviewees improved their perception of affect policy change. I asked a question about what information, if any, was particularly helpful in improving the participants' ability to affect policy change. One participant indicated my section on being selective to which problems you bring to administration was helpful.

I really like "pick your battles" section. I (as usual) expounded upon that in some of my suggestions earlier. But this is probably the most important initial element in starting these conversations. Knowing what and when to approach admin and WHICH admin to approach.

From my perspective, being selective may improve a band director's relationship with administrators as the band directors are not constantly bringing issues to the administration. In turn, the administration does not always view the band director as someone who always has a problem to discuss.

Another participant indicated that the information in the infographic about keeping ideas student-centered was important. One of the interviewees stated that their principal will not change anything unless it is for the benefit of the students. I included that while some policy change may have a side effect and benefit for the adults, some administrators will not change policy or use resources unless there is a direct benefit for the students. One band director stated that was helpful was “The reminder that admin is usually interested if they know they are doing something for a student’s well-being.” In my experience, while some policy changes will inherently benefit the teacher, administrators are always looking out for the students’ best interests first.

Lastly, one participant echoed one of the interviewees in saying the information on bringing solutions to administration when bringing problems was particularly useful and helpful. “I think your inclusion of the statement that administrators appreciate being brought a solution to a problem is particularly useful.” In my personal experience, this is a solid recommendation to improve your perception in affecting policy. Having tools and solutions for administrators always empowered me to bring issues to their attention, which is the first step in affecting a policy change.

### **Experience in a Policy Change Movement**

One question in the interviews was about experience in a policy change movement. I asked the participants if they had any experience with a policy change movement and how that affected their perception to affect further policy change. Most participants indicated they had at least some level of experience with policy change and

that those experiences typically were a positive influence on their perception to affect further policy should they feel so inclined to pursue policy change.

The data showed examples from small policy change such as how many field trip forms must be filled out throughout the course of a fall marching band season. For example, High School Band Director A stated:

When I was at High School C, their policy for band had been that every single kid had to fill out a field trip form for every single away game and every single competition. Well, I made a proposal that we just had a one all-purpose field trip form for the entire season, and that made things easier for parents. We created one all-inclusive form, the School Board approved that, and we started using that for every year after thereafter.

I feel the above policy change is a great example of a band director who affected policy change to alleviate logistical issues. In my experience, it takes time to disperse, sign, and collect a field trip form for every away game and contest. Only having to complete this process once would be a welcome change.

Middle School Band Director A had been involved with a larger scale policy change with band directors and what the performance expectations were for them to receive their full supplement throughout the course of the year. It was a lengthy process that affects students because band directors were then incentivized to participate in the SCBDA state level events.

We went through a series of you have to participate in region, you have to participate in all-state, all-region and you have to be a part of all-county to receive



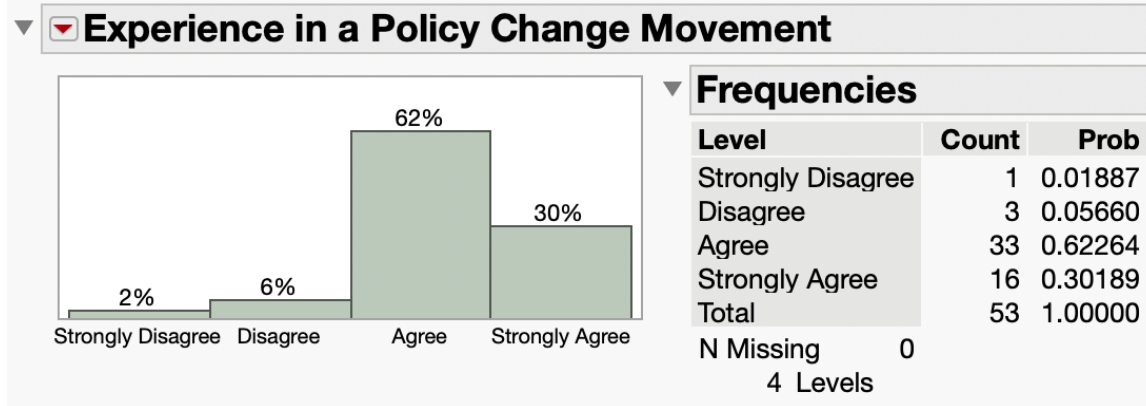
your supplement. Since my time as lead teacher, it has become written policy with contracts that we sign and follow up at the end of the year too. Most recently, if you don't meet the justifications, they actually take the money back at the end of the year. You have to give the money back if you didn't do things you said you were going to.

The above example shows how policy change can be on the macro, district, or county level. While smaller changes may happen within the schools, band directors also affect policy change in their counties and districts.

In the surveys, the participants were given examples of what policy changes their peers had participated in and asked if that knowledge encouraged the participants to pursue policy change should they wish. Results from this question showed most of the participants indicated they were more confident after reading the information in the infographic on policy change movement experiences. 62% of the participants selected "agree" and 30% of the participants selected "strongly agree". There was a small percentage that did not feel more confident after reading the information in the infographic with 6% selecting "disagree" and 2% selecting "strongly disagree" (Figure 3.4).

**Figure 3.4**

*Experience in a Policy Change Movement*



The survey data included an open-ended question asking for policy change movements that the participants may care to share. One participant included their account of defining the private lessons program that would occur during the school day.

I am not sure that what we did actually affected a policy change as much as we helped clarify the district position. However, when meeting with the superintendent, we presented what other schools were doing and presented it as a convenience to parents and students. This was approved by the superintendent. That same band director also included an experience with justifying the amount of money the district was preparing to give the band directors as a raise.

Back in 1998-99, Fine Arts Coordinator C asked us to document the number of hours we spent supervising kids outside our contracted hours to justify a request for a substantial increase in band director supplemental pay. For the entire year, the staff kept this information. I remember having right at 800 extra hours that year directly supervising kids outside the school day. The supplemental pay was

increased, but Fine Arts Coordinator C told me later the reason for this had nothing to do with the documentation we provided. He said when the school board found out how much Local School District B paid, they agreed on the spot. Thus, my comment about finding other (especially local) districts that have implemented these types of changes.

A piece of data, included in the above experience, that I found particularly helpful is knowing what neighboring school districts are doing. While providing documentation for the pay raise may have been effective, the school board saw a precedent and wanted to make sure their school district was able to keep pace with a neighboring one.

Lastly, there was a particularly helpful recommendation from a participant in this section of the survey. In Chapter 1, I gave a recount of a major policy change the S.C. band directors affected in the spring of 2018. This was a bill that would allow for marching band to count as a student's PE credit in high school. A survey participant recommended that I include that policy change movement and experience in the infographic. I do believe that experience would show how band directors can affect policy change at the state or macro level. I believe that would further improve the perception of S.C. band directors on their ability to affect policy change.

### **Roadblocks or Challenges When Advocating for Policy Change**

The second of my research questions is "What roadblocks continue to hinder a more positive perception to affect policy change?" During the interview, the participants were asked about what roadblocks they have experienced that hinder a more positive

perception to affect policy change. The three major roadblocks identified in this study were timing, communication, and an understanding of the long-term budgeting process.

### ***Timing***

A great example of a roadblock is timing. High School Band Director A indicated the time of the day and/or time of the year you go to the administration:

So, I have noticed that there are times during the year that's better to go to administrators than other times, like I will typically meet with our principal in mid to late January every year with kind of a state of the band, talk and let them know at that time: 'Hey, here's our problems. Here's our ideas to fix them.' That's the biggest challenge, being able to find an administrator with time, and I don't- that's almost not on them. It's almost that they're just so overworked.

In my experience, this is accurate. Timing can be a huge roadblock in an effort to affect policy change. For example, if you do not advocate a policy change with enough time left in the year, you may be pushed back another year before a policy could be revisited.

Another interviewee indicated that parental support would be a big roadblock. "A big one would be your push back from your parents. Do they agree with the change that is essentially going to happen?" Having all stakeholders, especially parents, on the same team would be a huge hurdle to overcome in a policy change effort.

### ***Communication***

Middle School Band Director A indicated that a line of communication between the teachers in the classrooms and the policy makers is a huge challenge.

Like we talked about before, there's not a direct link between us and the actual policy makers. You have to go through channels, and then a part of going through channels is making sure that the appropriate channels are on your side. So, you sort of have to convince someone else that what you're thinking is for the good of the students or for the good of the employees, for whatever reason. So that, if you're not a good convincer, you might have your work cut out for you there.

Not only does the above quote show that not having a direct communication link between the teachers and the policy makers as a problem, but it highlights that charisma and the ability to convince is key.

### ***Understanding the Long-Term Budgeting Process***

Several participants indicated that financial issues would be a roadblock in affecting policy change while other participants suggested that they had worked with administrators that just refused to listen. One participant said that perspective is a huge factor in administrators understanding why policy must change.

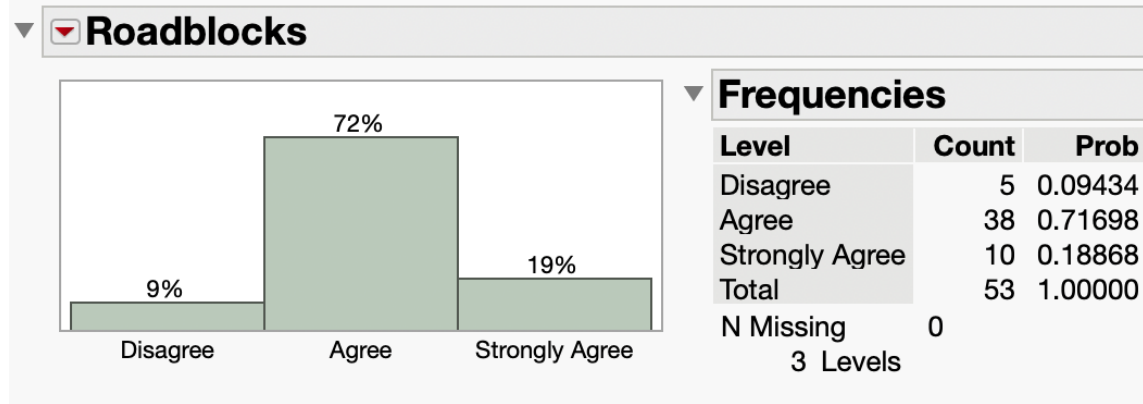
Not knowing the complete "story". We approach things from our limited perspective. This is not a bad thing. I am paid to be an advocate for my discipline and my students, but admin sees the whole picture that often is outside a teacher's purview. Understanding this, we have to realize that an administrative rejection is not necessarily permanent. It is our responsibility to inform admin over time to allow them to rethink a position. Again, admin is largely pro-student and pro-teacher. But they have to see a clear path to implement a policy change. This usually takes time.

The above quote not only highlighted the need for teachers to consider perspective but also indicated that answers may change over time. I believe that is an important data point to consider. Lastly, one participant indicated that avoiding roadblocks is like a puzzle in that the pieces must fit together and sometimes compromises must be made to make everything fit. “There are always ‘roadblocks’, however, I like to think of it like a puzzle. Most of the time there is a solution that may involve compromise that seems to ‘solve’ the issue.” In my experience, this is a great way to look at a problem. I always ask myself what I can “live with” in a situation to help my administration see some compromise. This has been effective in affecting policy changes in my career as the change appears to be a team effort as opposed to a two-sided “battle.”

In the survey, the infographic the participants read contained information on the roadblocks the interviewees highlighted. The survey participants then responded to a prompt asking if reading about potential roadblocks improved the participants’ perception on their ability to affect policy change. 72% of the participants agreed that it improved their perception while 19% strongly agreed and 9% disagreed (Figure 3.5).

**Figure 3.5**

*Roadblocks*



In addition to the above data, the survey collected what further roadblocks the participants have encountered. One participant indicated there may be negative and unintended consequences of advocating for a policy change. That participant once encountered a principal that took the opposite approach for what the participant was recommending. “For example, your room is too "loud," "small," "crowded," "hot," etc., let's just reduce the number of students you have. This has happened to me and to at least one other school in my district.” In some situations, administrators can go in the opposite direction of your intended goal.

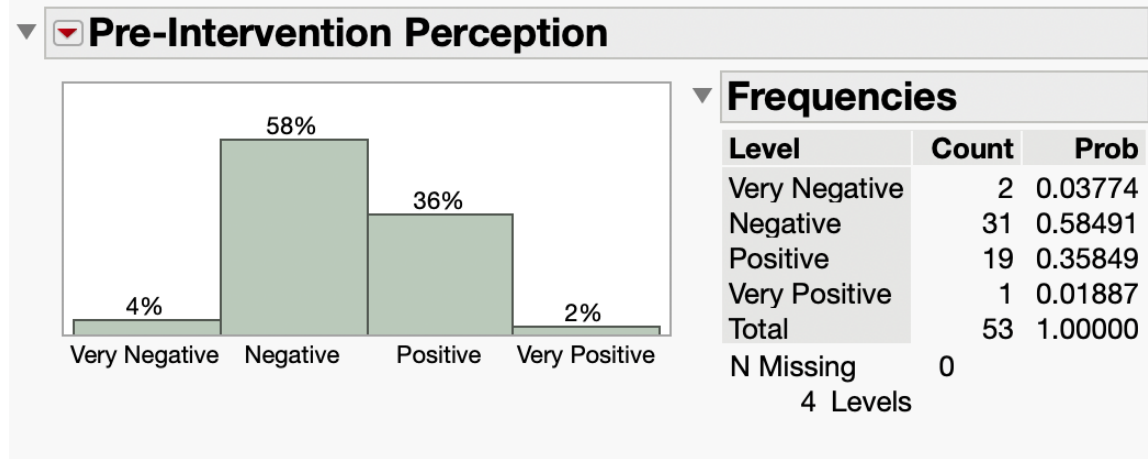
**Overall Effectiveness of Intervention**

Lastly, the survey asked what the perceptions the participants had on their ability to affect policy change both before and after reading the information in the infographic. Prior to the reading the intervention/infographic, 4% of the participants had a very negative perception on their ability to affect policy change, while 58% reported a

negative perception, 36% reported a positive perception, and 2% reported a very positive perception (Figure 3.6).

**Figure 3.6**

*Pre-Intervention Perception*

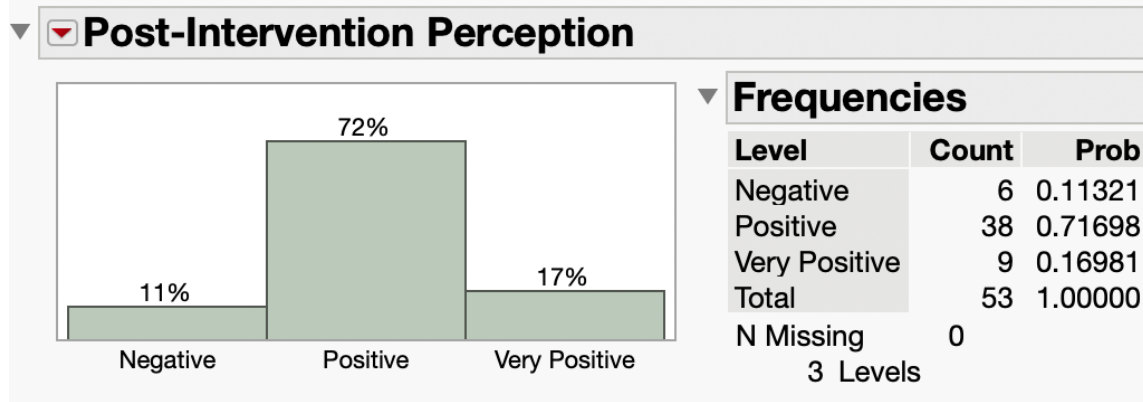


After the intervention/infographic was read by the participants, only 11% of the participants had a negative perception in their ability to affect policy change while 72% reported a positive perception and 17% reported a very positive perception (Figure 3.8).



**Figure 3.8**

*Post-Intervention Perception*

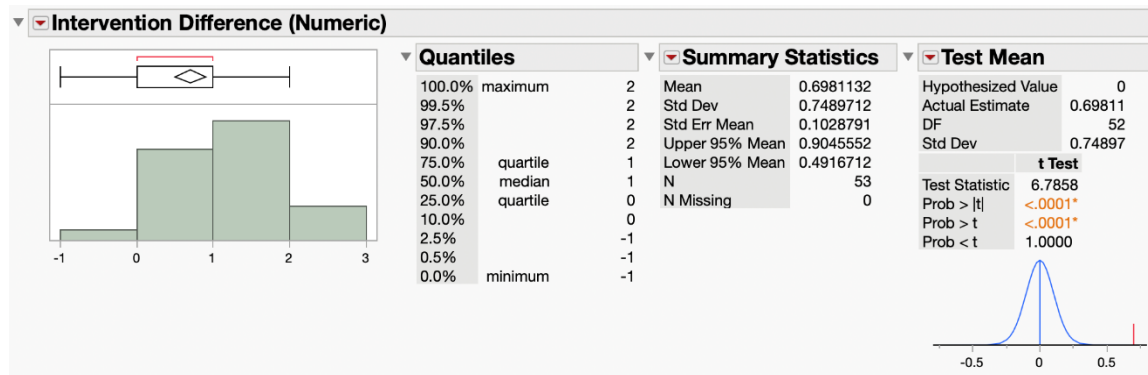


To discover what the mean difference in perceptions was, I placed values on the Likert scale items. Very negative was assigned 1, negative was assigned 2, positive was assigned 3, and very positive was assigned 4. The pre-intervention mean of the participants' perception on their ability to affect policy change was 2.358, while the post-intervention mean of the participants' perception on their ability to affect policy change was 3.057. The mean difference from the pre-intervention perceptions to the post-intervention perceptions was .698. Using a paired t-test, the t-value was 6.786, and the p-value was  $p < .0001$ . Using a null hypothesis that there would be no difference in the participants' perception to affect policy before and after reading the infographic, we can reject the null hypothesis and conclude there is a statistically significant difference between the perceptions of the participants' ability to affect policy change before and after the intervention (Figure 3.9). In this study, we can conclude that the intervention had a positive effect on the participants' perception to affect policy change raising the mean from 2.358 before the intervention to 3.057 after the intervention. We cannot

generalize this result to the entire population of band directors, but because of the random collection of survey results from all upstate S.C. band directors, we can generalize these findings to upstate S.C. band directors.

**Figure 3.9**

*Intervention Difference T-Test*



One piece of data of note was that one participant indicated they felt less confident after reading the intervention/infographic. The mean difference t-test shows that participant's answer below zero.

**Conclusion**

The improvement strategy for this study performed as expected. The study sought to discover information that would help improve the perceptions of band directors' ability to affect policy change. The data collected from the interviews proved useful and effective in the survey data. In every measurable section (perception to affect policy change, knowledge of NIHL, relationships with administration, knowledge of successful experiences in policy change movements, knowledge of common roadblocks and ways around them, and encouragement to participate in school leadership opportunities), the data showed that the intervention was effective in what the study sought to do.

Perceptions to affect policy change were improved. Most of the participants indicated their knowledge in NIHL was effectively raised. The participants indicated their understanding of how their relationship with administration can positively affect their ability to affect policy change. Knowledge of successful policy change experiences helped the participants increase their perception to affect policy change. Knowing common roadblocks and ways to navigate them improved the participants perception to affect policy change. A several participants felt encouraged and empowered to seek out school leadership opportunities while others indicated how school leadership experiences improved their perceptions to affect policy change.

The change ideas had the impact I intended in the study. I first was able to collect knowledge from veteran band directors who have been successful in their field. I believed this knowledge would prove helpful for not only younger teachers, but teachers who are continuing to improve as professionals. The infographic delivered key knowledge from the interviews with the veteran band directors and the survey data showed that all the information was, at minimum, somewhat effective in improving band directors' perception to affect policy change. Not only did the data show that perceptions were improved, but it also illuminated what roadblocks still exist when band directors are seeking to advocate for policy change.

In this analysis, I found that there are ways of effectively raising perceptions to affect policy change. The data showed that the participants indicated their perception to affect policy change was improved after reading the infographic which included information from the themes discovered in the interview transcripts. I learned some

lessons from conducting this study that will enhance the effectiveness of the next PDSA cycle, but overall, the study results were what I expected. In the next chapter, I discuss the implications of these findings for future research, practice, and policy.

## CHAPTER FOUR

### IMPLICATIONS

The problem of practice in this study is that while policy is implemented daily in schools (Rigby et al, 2016), there is no clear path for educators to affect policy change should a problem present itself in the classroom. The purpose of this study was to illuminate the perceptions of upstate S.C. band directors on their ability to affect policy change and to discover what roadblocks exist in the way of affecting meaningful policy change in S.C. public schools. In this chapter, I reflect on the limitations and lessons learned, discuss how to spread the changes this study discovered and what the next PDSA cycle would look like, and reflect on the improvement science process. I will also evaluate the theory of improvement considering the findings from the study, reflect on the aim of the study, discuss the implications of the findings, discuss the contributions this study has on research and practice, make recommendations for practice and policy, and conclude this dissertation.

#### **Reflection on the Improvement Science Process**

The overall research journey was enlightening. Now that I have a chance to reflect, I am grateful for this process and the overall experience of conducting my first meaningful study. While this process took me longer than most, I am proud of the work my committee and I have accomplished. From the beginning, conducting research and writing a dissertation seemed like an insurmountable amount of work. Like Roberts and Hyatt (2019) eluded in their book, *The Dissertation Journey*, I was standing at the base of Everest, and the summit seemed so far away. There were a couple of key moments for me

along the journey. The first was crafting my problem of practice and the research questions. I originally had them worded to focus on NIHL and not policy change in public schools. My advisor was key in helping me understand how we could reword both the problem of practice and the research questions to be appropriate for this study. A second key moment was discovering Improvement Science and using that as the methodology for this research. My advisor approached me about using Improvement Science, and it seemed perfect for the nature of this study. Improvement Science would allow me to use the PDSA cycle for this study and set myself up for future research using the PDSA cycle again.

This leads me to comment on the iterative nature of Improvement Science and how it shaped this study. I knew I would discover challenges and limitations in this study that could be accounted for in future studies. I would be able to make changes to this study to be more effective in future studies. This is exactly how I approach being an educator. No year is perfect but being reflexive and adjusting for future classes of students, future band concerts and performances, allows for our programs to continue to improve. Improvement Science naturally keeps the PDSA cycle going for future research and improvements to future studies.

My perspective changed a bit during this study. Again, I initially felt like this was a task I may never achieve. I have been told during my doctoral journey that once I finish defending my dissertation, I am considered an expert in our field. While I still feel far from an expert, I have gained the confidence to read and evaluate research for similar studies. This study pushed me to become more than I ever thought I could become.

My perspective on my colleagues has shifted a bit, too. When reading through the data, I was able to see into the perspectives and minds of my colleagues. They are passionate about what is best for their students, about what is best in the classroom, and improving our educational world for their students. This insight has given me a deeper appreciation of what my colleagues do daily in our S.C. public schools.

Two lessons I learned during this study were that the intervention can always be improved and that one should never underestimate the experiences and knowledge that educators have to offer. I believe educational leaders can apply these lessons to their practices. First, educational leaders should always be looking to improve the processes of how change is made. There will never be a perfect method, but looking at what was successful, what was not successful, and why will help educational leaders continually evaluate and improve how we do things. The intervention from this study is a great example of that. The findings showed the infographic was effective in raising the participants' perceptions of their ability to affect policy change; however, I found recommendations and ideas on how to make the infographic even more effective. Educational leaders should be taking this approach with their leadership decisions and processes.

The second lesson showed me that my colleagues – the band directors in this study – have a wealth of knowledge and experiences. Gathering that data was key to finding what information the infographic needed to display to be effective. Even during the survey data collection, I had open-ended questions that gave me even more data on the participants' experiences and knowledge. Educational leaders should continually be

discovering what experiences and knowledge their faculties have. We should not be taking for granted what information or helpful data we may have in our own building.

### **Limitations and Lessons Learned**

This PDSA cycle gave me insight into improvement science in a couple of ways. First, the PDSA cycle showed me a systematic approach to change and discovering if that change was indeed effective. I do believe the systematic approach helped me as a budding researcher to help me keep my ideas and the study organized. Another insight I gained from the PDSA cycle is that the intervention is such an important component of an improvement science study. The intervention I created for this study, while far from flawless, did prove effective in raising the participants' perceptions about their ability to affect policy change. I also know that the intervention can be improved upon and will, hopefully, be more effective in future PDSA cycles with this research.

There were a few unexpected outcomes in this study. First, several participants focused on the NIHL component in this study. While I was using NIHL as a problem where policy change would benefit band students' hearing and safety, my research questions were about perceptions to affect policy change and what roadblocks hinder a more positive perception to affect policy change. While I made the purpose of the study clear in the surveys, some participants focused more on the hard data of NIHL as opposed to thinking about their perception to affect policy change. This may be due to recent student health and safety issues forming new policies in schools (Kerr et al, 2013; Mummareddy et al, 2019; Scarneo-Miller et al, 2020; Scarneo-Miller et al, 2021; Tripp et



al, 2015). In future PDSA cycles, I will make my verbiage even more clear to keep the participants focused on the true nature of this study.

Another unexpected outcome was that one participant indicated they felt less confident in their ability to affect policy change after reading the information in the infographic. The survey did not have an open-ended question to gather data on why a participant may answer in that way. I believe in future PDSA cycles, I will adjust the survey to collect that data in the scenario that another individual wants to answer that they also feel less confident to affect policy change after reading the information in the infographic.

Two challenges occurred during data collection. The first of these challenges was interest. While I received plenty of data, I had to be persistent in getting responses to the survey. I know that is a common issue in this form of research, but I now have a deeper understanding of what that looks like. I do believe the survey could be reworked so that the participants do not lose interest after only partially completing the survey. The second challenge was timing. I was confident that the participants would be more likely to respond to my survey in May after most of their responsibilities at the schools were finished. That may be incorrect. I would like to continue to see if there is a better window for band directors to respond to a survey during the spring semester. It is possible the time in March after their state performance assessment may prove more effective in collecting responses.

I learned many things during this study, but the largest of which is that my colleagues in the band world have a lot of great experience and knowledge in change.

They are a valuable resource, and I would like to continue to use them to further this research. I also discovered that the band director community likes to share. I found the interview portion of data collection to be especially helpful because the participants were so eager to share and lend their knowledge for the greater good.

One other lesson I learned is that the data is the data, and you cannot wish the data were different. I expected my survey data to show even more of an improvement in perceptions to affect policy change, but what I learned is that my study can be improved upon. Knowing how and where a study can be improved is key to conducting more meaningful research in the future.

Overall, these experiences taught me that improvement science is an on-going and ever-changing research methodology. While this study was effective, it can be improved and be more effective in creating change in future PDSA cycles. These experiences also illuminated how this study can directly influence and begin a new PDSA cycle. I spent a lot of time reflecting on how I can improve this study for a future study once this one was completed.

### **Theory of Improvement**

As a reminder, policy change in education is political and complex (Ydesen & Anderson, 2020) and this study did not prove otherwise. My theory in this study was that if I could discover what roadblocks were in the way of raising band directors' perceptions of their ability to affect policy change in S.C. schools, I could use that data to improve the participants' perceptions to affect policy change using an intervention (in this study, an infographic). While the participants indicated their perceptions had been improved, and

that improvement was statistically significant, there are ways to improve the effectiveness of the intervention.

In future studies, I would modify the infographic to include more data in the areas the participants indicated would be helpful. For example, I could include more hard data on NIHL and examples of successful policy change movements that band directors have influenced. I would also further clarify the purpose of this study. While I felt I was clear in the purposes of this study, the participants focused more on the NIHL data than I intended. Again, while NIHL is the example of a problem in classrooms that could be eliminated by a policy change, the study was on perceptions to affect policy change, not on NIHL. I believe my colleagues are passionate about NIHL and similar issues in their classrooms; however, I would need to modify the infographic and survey to make the purpose of the study even more clear.

The theory of improvement in this study used initial interviews with five band directors to gather important data that the survey participants would then consume and respond to. I do believe this was effective in creating the infographic. The infographic was effective in raising the participants' perception to affect policy change. The questions asked in the interviews gathered ample data for the survey participants to read and respond to. I do believe I would amend the interviews in future PDSA cycles to further gather data on band director opinions of change. While I asked many questions about relationships with administrators, school leadership roles, experience in policy change movements, etc., I did not ask how the band directors felt about change. I believe further understanding the personal opinions of band directors on change can illuminate another

roadblock in the way of improving their perceptions of affecting policy change. It is possible that band directors do not want change. Discovering why change is something band directors would want to avoid would further disentangle the complexity of the subject of policy change.

The infographic will be modified to add more data and include some formatting suggestions such as a couple of the participants did not like the white font. I have had multiple participants want to continue the conversation of policy change in public schools with me. Several of the band directors have reached out excited that this research is being conducted. For me, that is a positive sign that this research is not only necessary, but it is welcomed. This encourages me to conduct further PDSA cycles using this study as a baseline by which I can improve.

### **The Aim**

The aim of this study was to discover what perceptions upstate band directors have on their ability to affect policy change, identify what roadblocks are in the way of improving those perceptions, and attempt to raise the participants' perceptions on their ability to affect policy change. I believe this study achieved the intended impact. While the study could be improved, the data showed that the intended impact was, in fact, present.

If future studies continue to unlock what holds S.C. educators back in advocating for policy change that benefits our S.C. students, we can build literature and further interventions to empower S.C. educators. If we think of band directors in S.C. as the local context and all S.C. educators as a broader context in S.C. education, I believe there are a

couple of changes this research can impact. First, band directors can be more enlightened on how their position in schools may inherently be one of leadership. The data collected from several participants showed that being in the role of a band director immediately establishes some form of school leadership and opens opportunities for positive relationships with administrators. Using that data, younger band directors can begin to see how their role in the school is not just about teaching scales and preparing for concerts. While this study did not research NIHL, it clearly got the participants thinking about the issue of NIHL in their classrooms and the risks to students. While this study is on the perceptions of the band directors to affect policy change, this study can also serve as a springboard to launch further collaborative efforts to study NIHL and promote ways to affect policy change to eliminate the risks of NIHL in music classrooms.

On the macro level, this research can spread to encouraging and raising the perceptions of all S.C. educators to affect meaningful policy change in their classrooms, schools, districts, counties, and the state. While this study uses band directors as the participants, the same concepts for gathering data, presenting the data in the form of an infographic, and surveying participants could be used across all subjects and levels of teachers in the state. For example, a future study could use the effects of heat and humidity on student-athletes as the issue (like how this study used NIHL) and use coaches as the participants.

### **Implications of the Findings**

The findings of this study showed that the role of leadership, perceptions, experience in a policy change movement, and various roadblocks all influenced the

participants' perception on their ability to affect policy change. This complexity is consistent with the findings of previous research on policy change in education (Ellis & Leaf, 2005; Pearson & Rao; Rigby et al, 2016; Rowan & Miller, 2007; Ydesen & Anderson, 2020). The problem of practice in this study that there is no clear system for policy change or change in practice that is enacted by educators and/or educational leaders. The findings of this study have implications on people and groups that use a similar intervention in that this study has proven that an infographic can be effective in changing perceptions of the study participants. Finding that the participants' perceptions to affect policy change were improved by a statistically significant amount shows that this form of an intervention can be used in similar studies. I also believe the findings show that perfecting how effective an infographic can be as an intervention will take some trial and error. As stated above, some participants focused too much on the information on NIHL and two participants indicated they did not care for my choice in font color. Identifying these pieces on how to improve the intervention is key from study to study.

From an educational leadership perspective, my findings indicate the importance of a positive relationship between educational leaders and teachers. While it is legally and ethically important for an administrator to care for the safety and health of students (Ellis & Leaf, 2005), teachers must establish a positive relationship with administrators to bring problems that may require policy change. My data consistently suggested that a positive relationship between a teacher and their administration not only gives the teacher confidence to advocate for policy change, but that relationship gives the policy change

effort a better chance of success. From my perspective, the data enlightened me on some of my colleagues' concerns when approaching educational leadership. For example, one participant suggested that administrators just do not have enough time to listen to or advocate for change in classrooms. Another participant indicated that administrators would take the approach of reducing the number of students who could take band and would try to solve the risks of NIHL by hindering the band program. Reading these concerns gave me much-needed perspective on what positive and less than positive relationships with administrators look like. This widened perspective will help me as an educational leader as I will strive to alleviate the concerns of the faculty to bring issues to me and to advocate for change. I also now know better why some teachers may become jaded or apathetic in having a positive relationship with their administrators.

There were some implications for equity in education from this study. This study continued the conversation with teachers about policy change for the benefit of students. While this study focused on the perceptions of the adults, a heightened confidence in the adults' ability to affect policy change directly benefits the students. When a problem is present in classrooms that inhibits the educational process or presents dangers to student health, teachers have a responsibility to advocate for change (Ellis & Leaf, 2005). By continuing this research, we can further find ways to empower our teachers to effectively advocate for policy change and, in turn, give our students a better classroom environment.

These findings are consistent with the literature from Chapters One and Two of this dissertation. Pearson and Rao (2006) emphasized that teachers are the key

component in policy change in the classroom setting. However, Ydesen and Anderson (2020) indicated how complex and difficult the interactions between various stakeholders can be when advocating for policy change. Those two examples above show that while empowering teachers is key to effective policy change, that process involves complex and sometimes difficult relationships between stakeholders.

### **Contributions for Research and Practice**

This study reaffirms much of the body of knowledge but also addresses a gap in the literature. While much of the literature in educational policy change looks at the challenges present when proposing and implementing policy change (Ydesen & Anderson, 2020), this study further looks at the perceptions of classroom teachers as they advocate for policy change. While this study may not provide groundbreaking data for the educational policy literature, it does provide further perspectives from a specific group of educators. While those findings cannot be generalized to the entirety of band directors or even the band directors of S.C., gaining more perspectives through this study and subsequent studies will only add to what we know about policy change movements and their potential effectiveness in education. While all research “adds to the literature,” I do believe this study adds a specific perspective that will be helpful in better understanding why teachers do or do not advocate for policy change and what roadblocks present themselves to those teachers.

Future studies can take the process and methods of this one and discover the perceptions of different populations of teachers. For example, I would like to replicate this study using the band directors from the midlands of S.C., and then conduct another



study with the band directors of the low country of S.C.. This study could also gather the perceptions of the science teachers or coaches in S.C.. There are many possibilities to continue to gather perspectives and perceptions across multiple educational populations.

Practically, this study shows that the term “knowledge is power” is accurate when describing how to improve perceptions to affect policy change. Giving the participants from this study more knowledge on how to build positive relationships with administrators and how that can affect their ability to successfully advocate for policy change had a positive effect on their perceptions to affect policy change in the classroom. It is practical to continue to build a knowledge base of information and data that is helpful for educational leaders to empower educators and their abilities to advocate on the behalf of their students.

### **Recommendations for Practice and Policy**

I have two recommendations based on the findings of this study. The first is incorporating methods or skills for building a relationship with administrators for younger teachers. Villar and Strong (2007) discovered that mentoring and investing in new and young teachers provided benefits to education and society that far outweighed the cost of the programs the teachers participated in. Teaching and applying skills for communicating and building relationships with administrators should be incorporated into induction courses for new teachers in S.C.. While having a strong relationship with administrators is key to having a more positive perception on affecting policy change, that relationship would be beneficial for young teachers in many aspects of their jobs.

Another recommendation is to encourage more teachers to be involved in any kind of policy change movement. Good et al. (2017) stated that teachers must have a voice in the policy design process rather than solely having a hand in the policy implementation process. The conditions in a policy design and change process must be favorable for a teacher to believe they can successfully advocate for and construct new policy (Good et al., 2017). I believe that educational leaders can find opportunities for teachers to be involved in policy change movements, as well as create favorable conditions for teachers to feel comfortable affecting policy change. While School Improvement Councils (SIC) and various school committees present opportunities for teachers to be involved in change initiatives, the SIC and committees often limit the number of teachers that can serve. Educational leaders can be more proactive in involving more faculty in decision making processes and, in turn, giving faculty members more opportunity to understand the complex and often political process of policy change in a school.

Good et al. (2017) discussed how a lack of time, a perception of isolation, and a lack of understanding about the actual power structure in schools or education were norms in schools that created unfavorable conditions for teachers advocating for or participating in policy change movements. Educational leaders need to better understand how these norms are negatively affecting teachers' perceptions to affect policy change. I recommend educating our educational leaders on these norms and unfavorable conditions that lead to teachers' negative perceptions. Educational leaders should, in turn, make efforts for better scheduling so teachers have more time to promote policy change, create

more collaboration efforts for teachers to participate in, and educate teachers on how the power structure in education is not simply hierarchical but collaborative in nature.

The largest implication for policy this study shows is how decision-makers should continually consider not only the needs of all stakeholders when changing policy, but decision-makers should also consider gathering the input and data from the faculty members affected by a policy change or lack of change. This is consistent with Ellis and Leaf's (2005) assertion that health and safety policy must change for the protection of students and staff in schools. This study was on how to give educators a more positive perception to affect policy change. An implication of the study's findings is that decision makers must be an active part in raising those perceptions to affect policy change.

### **Spreading Changes/Next Cycle (Act Phase)**

After analyzing the data, the intervention was effective. The participants indicated that the infographic was effective in raising the perception of the ability to affect meaningful policy change. However, I believe the intervention can be improved and should be adjusted. More information on successful policy change movements needs to be added, and the purpose of the study needs to be clearer to the participants. While research on the need for preventative measures to be in place for the risks of NIHL is present (Bockstael et al., 2015; Chesky & Amlani, 2015; Federman & Picou, 2009; NIOSH, 2015), this study is not about NIHL, but rather NIHL is an example of how policy change can be beneficial for our students. This study is about affecting perceptions on the ability to affect policy change, so the intervention needs to make that point clearer than in this study.

Participants also indicated more examples of successful policy change movements in our field would be helpful. As I indicated previously, a large policy change movement the S.C. band directors were involved in was getting the bill passed that allowed marching band to count as a high school student's PE credit. That would be a great piece of data to add to the infographic, along with other successes in affecting policy change.

Beyond this study and further PDSA cycles, I would like to present this study and future studies along with their findings to the S.C. band directors (and other music teachers) at the South Carolina Music Educators Association (SCMEA) meeting in February. I would be able to show ways of empowering our music educators in S.C. to affect policy change when they see a need or a problem in the classroom. I believe presenting this research and the findings can not only spread information about how to raise perceptions to affect policy changes, but further data can be collected to add to the data collected in this study.

I took the findings of this study back to two of the original interviewees for member checking. I presented them with the findings and get their reactions to the additional data found in the surveys. In the future, I would like to bring the findings back to the other original interviewees, as well. However, I will only be able to bring these findings to four of the five original interviewees. Unfortunately, one of the interview participants passed away between the time I conducted the interviews and the present. While member checking two of the original interviewees should provide a level of trustworthiness, having the reactions and data from the other two available interviewees should provide a higher level of trustworthiness for this study.

There are a couple of factors that I believe will facilitate an easier data collection in the next PDSA cycle. Now, having done this study once and taken notes of the limitations and lessons learned, I will be able to adjust my intervention and survey for better data collection. I believe that process will be quick. This study also raised the awareness of my colleagues' perceptions of their abilities to affect policy change. I have gotten several messages from the participants that they appreciated this study starting this conversation and the participants would like to continue it.

### **Conclusion**

This study is only the beginning of discovering how S.C. educators and educational leaders can better work together to affect policy changes that benefit our students. While the findings of this study show the methods were effective, this study is only the tip of the iceberg. Further PDSA cycles will continue to discover more about what is effective in raising educators' perceptions in their abilities to affect policy change.

While this study focused on band directors, it contains a broader significance for all of education. This study highlighted an effective way to gather data necessary for improving perceptions to affect policy change. This form of study can be applied to all fields of education, and the improvement science PDSA cycle makes it possible to continue these rapid cycles of research.

The problem of practice in this study was that there is no clear path for educators to affect policy change once a change is considered needed or necessary. This study began finding ways for educators to navigate the complex path of changing policy in

education. Further research in this area will further illuminate a path that will empower educators to advocate for policy change.

In summary, this chapter highlights that while this study was effective, further studies and research in this area are needed. Not only can this study be improved upon to be more effective in future PDSA cycles, but this research can be applied to all areas of education—not only band directors and issues with NIHL in music classrooms. This dissertation also found that there is still more work to do in discovering effective ways to improve perceptions to affect policy change. Further PDSA cycles will continue this research and will further illuminate a path for educators to advocate for needed changes in education.

## APPENDICES

## Appendix A

### Interview Guide

Opening: Hello, my name is Gary Rhoden, and I am a researcher from Clemson University. Thank you very much for expressing interest in participating in our study, “Can You Hear Me Now? An Improvement Science Study on Policy Change in Public Schools” The purpose of today’s interview is to ask you questions about your experiences as a public-school teacher with regard to affecting policy change. The meeting will last approximately 30 minutes and will be recorded to ensure I accurately capture the conversation.

It is important to me to ensure you feel comfortable sharing your experiences, and so I will not include any information in our study that can be used to identify you. I have provided an informed consent document that gives you more details on your involvement and how I will use and protect your information. [Hand out informed consent, give time for people to read, and answer questions. Sign & collect forms for participants who would like to participate.]

Thank you very much.

Questions:

- 1) What is your name, school, and current position?
- 2) How long have you been in your current position?
- 3) Do you have any school leadership experience?
- 4) Have you ever been a part of or advocated for a change in policy in your school/district?



- 5) Are there policies in your school/district that you believe need changing or revisiting?
- 6) How often do you communicate with school/district leadership?
- 7) Do you feel comfortable speaking with school/district leadership?
- 8) Does your school/district leadership ever make themselves available to receive suggestions/advocacy for policy change?
- 9) Would you feel comfortable in advocating to your school/district leadership the need for policy change?
- 10) If you were to desire to advocate for policy change, what challenges/roadblocks do you see in your way?
- 11) What research, if any, have you read on noise induced hearing loss in music classrooms?
- 12) Does your school provide any resources or mitigating measures to help prevent NIHL in you or your students?
- 13) What other information on successful advocacy for policy change would be helpful for you?

## Appendix B

### Post-Intervention Survey

# Rhoden Dissertation Survey

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#### Consent Agreement Key Information About the Study:

William “Gary” Rhoden Jr. is inviting you to volunteer for a research study. Gary is a Doctoral Candidate at Clemson University conducting the study with Dr. Daniella Hall Sutherland. Study Purpose: The purpose of this study is to research upstate South Carolina band directors' perception to meaningfully affect policy change in education. The study seeks to illuminate band directors' perception of their ability to meaningfully affect policy change in education.

Voluntary Consent: Participation is voluntary, and you have the option to not participate. Activities and Procedures: Your part in the study will be to participate in an approximately 10-15 minute survey answering questions about your personal and professional perception of being able to affect educational policy change in SC schools.

Participation Time: It will take you about 10-15 minutes to answer all the questions in the survey and participate in this study.

Risks and Discomforts: We do not know of any risks or discomforts to you in this research study.

Possible Benefits: You may not benefit directly from taking part in this study; however, this study will potentially begin to help alleviate the challenges in affecting policy change as an educator. A goal of this study is to begin the conversation on what processes and/or pathways exist for educators/educational leaders to affect meaningful policy change in public schools.

Exclusion/Inclusion Requirements: It is a requirement that participants in this study be a band director in a public school in upstate South Carolina.

Equipment and Devices that will be Used in Research Study: Computers and Qualtrics will be the only devices used in this study.

Protection of Privacy and Confidentiality: The results of this study may be published in scientific journals, professional publications, or educational presentations. The following procedures will be used to maintain data confidentiality. When participants give consent and are enrolled in the study, each will be assigned a unique study identification number. This ID number will be associated with all participant data that are collected, we will establish file naming conventions and hierarchies for file and folder organization, as well as conventions for versioning files. This data file will be stored securely and separately

from de-identified data. We will also develop a directory that lists all types of data and where they are stored and entered. As described above, we will create a log to track data entry and downloads for analysis. We will utilize secure cloud storage that only the researcher (William) has access to. Identifiable data will be stored on a removable secure hard drive that is stored separately from de-identified data. This hard drive is maintained in a locked cabinet in William's home office where only William can access. Identifiable data will be deleted at the conclusion of the study or December 31, 2024, whichever occurs first. De-identified information could be used for future research studies or distributed to another investigator for future research studies without additional informed consent from the participants or legally authorized representative.

Contact Information: If you have any questions or concerns about your rights in this research study, please contact the Clemson University Office of Research Compliance (ORC) at 864-656-0636 or [irb@clemson.edu](mailto:irb@clemson.edu). The Clemson IRB will not be able to answer some study-specific questions. However, you may contact the Clemson IRB if the research staff cannot be reached or if you wish to speak with someone other than the research staff. If you have any study related questions or if any problems arise, please contact Mr. William Rhoden at 864-706-5165 or [wrhoden@g.clemson.edu](mailto:wrhoden@g.clemson.edu), or Dr. Daniella Hall Sutherland at [dhall5@clemson.edu](mailto:dhall5@clemson.edu).

Consent: By participating in the study, you indicate that you have read the information written above, been allowed to ask any questions, and you are voluntarily choosing to

take part in this research. You do not give up any legal rights by taking part in this research study.

- I consent to the above and will participate in the study. (1)
- I do NOT consent to the above and will NOT participate in the study. (2)

---

What is your name? (This will be redacted. No identifying information will be included in the study.)

---

What level band to you teach? Select all that apply, please.

- Elementary School (1)
- Intermediate School (2)
- Middle School (3)
- High School (4)

---

In which county are you currently teaching band?

- Abbeville (1)
- Anderson (2)
- Cherokee (3)
- Greenville (4)
- Greenwood (5)
- Laurens (6)
- McCormack (7)
- Oconee (8)
- Pickens (9)
- Spartanburg (10)
- Union (11)
- York (12)

The purposes of this study are: 1) To evaluate the perceptions of educators, specifically SC Upstate Band Directors, on their ability to affect meaningful policy change in SC public schools. 2) To identify what roadblocks/challenges continue to hinder these educators ability to affect meaningful policy change in SC public schools.

Have you read and do you understand the purposes of this study?

Yes (1)

No (2)

---

This is the second round of data collection in this study. In the first round, we interviewed five SC Upstate Band Directors on their perceptions of their ability to affect policy change in SC public schools. We identified the following themes that affected the participants' perception of being able to influence policy change in their educational settings: 1) Number of years teaching. 2) Relationship with school and/or district level administration. 3) Experience in a policy change movement. 4) Knowledge of the educational problem what would necessitate a policy change (in this study we are looking at the problem of Noise Induced Hearing Loss (NIHL) in music classrooms). 5) School leadership experience. 6) Supports existing at the district level for fine arts teachers. 7) Roadblocks that exist for an educator seeking to affect policy change in SC public

education.

Have you read and do you understand the themes discovered in the first data collection for this study?

Yes (1)

No (2)



Please Answer the Following Questions:

	No Knowledge (1)	Little Knowledge (2)	Some Knowledge (3)	A Lot of Knowledge (4)
What level of knowledge do you have on Noise Induced Hearing Loss	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



(NIHL) overall?

(1)

What  
level of  
knowledge do  
you have on  
the effects of  
NIHL on  
students? (2)



What  
level of  
knowledge do  
you have on  
NIHL in music  
classrooms? (3)



---

Using the first set of data from this study, we have created a document to act as an intervention. The purpose of this intervention is to discover whether the information collected in the first round of data collection has any effect on your perception of your

ability to affect meaningful policy change in SC Public Schools. The intervention is attached to the email I sent you in the form of an infographic. Please read the infographic as questions in this survey will be based on the effectiveness of the information in it.

Were you able to download the infographic? If so, please read the information included in it.

- Yes and I have read it. (1)
- No, I haven't been able to download it. (2)

End of Block: Background Knowledge on the Study

---

Start of Block: Questions About the Intervention Themes

Please answer the following question:

	Very Negative (1)	Negative (2)	Positive (3)	Very Positive (4)
How positive was	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

your  
perception of  
your ability to  
affect  
meaningful  
policy change  
in SC public  
schools prior  
to reading the  
information in  
the  
infographic?  
(1)

---

Please answer the following question:

	Very Negative (1)	Negative (2)	Positive (3)	Very Positive (4)
--	----------------------	-----------------	-----------------	----------------------

---

OVERALL,  
 how positive is  
 your perception  
 of your ability to  
 affect  
 meaningful  
 policy change in  
 SC public schools  
 AFTER having  
 read the  
 information in  
 the infographic?  
 (1)

Please answer the following question:

	Complete ly Ineffective (1)	Somewh at Ineffective (2)	Effecti ve (3)	Highl y Effective (4)
--	--------------------------------	------------------------------	-------------------	-----------------------------

OVERAL  
 L, how  
 effective was  
 the infographic  
 on improving  
 your  
 perception to  
 affect  
 meaningful  
 policy change  
 in SC public  
 schools? (1)



Please answer the following question:

	Completel y Ineffective/Woul	Somewh at Ineffective (2)	Somewh at Effective (3)	Highl y Effective (4)
--	------------------------------------	------------------------------	----------------------------	-----------------------------

d Not Further

Empower Me (1)

How effective was the information on NIHL in raising the amount of knowledge you have about NIHL? In other words, should you feel passionate about



fixing the  
problem of  
NIHL in  
music  
classrooms  
, would the  
informatio  
n provided  
further  
empower  
you to  
advocate  
for a policy  
change to  
fix the  
problem of  
NIHL in  
music  
classrooms  
? (1)

---

What other information/data on NIHL would prove helpful if you wanted to pursue a policy change in your school/district? A policy change example may be that your school district provides hearing protection or hearing conservation measures in every music classroom. Another example would be a policy change that requires schools provide adequate space for students to rehearse, practice, or perform in.

---



---

Please answer the following question:

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
The information on	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



relationships  
with  
administration  
helped you  
understand  
how to engage  
with  
administration  
in ways that  
meaningfully  
affect policy  
change. (1)

---

Do you have any other suggestions or recommendations on how to build a positive relationship with administration?

---

Do you have anything further to add on how a relationship with admin may effect an educator's perception on their ability to affect policy change?

---

Please answer the following question:

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
The information on experience in a policy change movement made me more confident in participating in a policy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

change  
movement in  
the future.  
(1)

---

Do you have any experience in a policy change movement that you would like to share? If so, would you please share your experience below?

---

---

The infographic shows that teachers gain confidence in advocating for any kind of change (policy change included) as they gain more years of experience. If you have experienced the same increase in confidence over your years of teaching, please provide a short account of your experience. If you have yet to experience this increase in confidence, please provide a short account of how this information either encouraged or discouraged you and why.

---

In our interviews, all participants indicated that they had school leadership experience along with a positive perception of their ability to affect policy change in SC public schools. Multiple participants also indicated that their school leadership experience(s) contributed to this more positive perception.

Do you have prior school leadership experience?

If so, how has that experience impacted their perception of their ability to meaningfully affect policy change?

If not, how has the information in the infographic impacted your perception to meaningfully affect policy change?

---

-----

Intervention The infographic highlights several of the roadblocks our participants indicated were present in affecting meaningful policy change. What, if any, roadblocks/challenges have you experienced?

---

Please answer the following question:

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Reading about the roadblocks other educators experience in affecting meaningful policy change improves my perception to affect policy change in SC public schools. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

-----

Please answer the following question:

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Having district-level support for the fine arts (see: Fine Arts Coordinator or similar role) improves my perception of my ability affect meaningful policy change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

in SC public  
schools. (1)

What other information could be included in the infographic that would make it more effective in improving educators' perception of their ability to affect meaningful policy change?

---

Intervention What, if any, information in the infographic was particularly helpful in improving your perception of your ability to affect meaningful policy change?

---

Intervention What, if any, information in the infographic was not helpful in improving your perception of your ability to affect policy change?

---

## Appendix C

### Infographic

**CAN YOU HEAR ME NOW?**  
Policy Change and Protecting our Students' Ears

**POLICY CHANGE IN SCHOOLS**

- Policy change in schools is complex and often politically driven (Aasen et al., 2014; Pearson & Rao, 2006; Ydesen & Anderson, 2020).
- Relationships with administrators, experience in advocating for policy change, years of teaching experience, and knowledge of research are all factors in successful advocacy.

**NOISE INDUCED HEARING LOSS (NIHL)**

According to the CDC and further research, all band instruments cross the threshold for decibel levels that are safe for ears (NIOSH, 1998; NIOSH 2015; Tufts & Skoe, 2018). Chesky (2008) discovered that more than 12.5% of children aged 6 to 19 already suffer from NIHL to some degree.

**NIHL**

- NIOSH and the CDC recommend that workers can safely tolerate an 85 decibels across an 8 hour work day.
- That number of hours drops exponentially above 85 decibels. For example, if a workplace sustains an average of 94 decibels, the recommended exposure is one hour.

**NIHL IN MUSIC CLASSROOMS**

- Band students are exposed to noise far above the 85 decibel threshold even when practicing alone (Tufts & Skoe, 2018).
- Larger ensembles can sustain well above the recommended exposure.
- This puts our students (and ourselves) at risk for permanent hearing loss.



# CAN YOU HEAR ME NOW?

Policy Change and Protecting our Students' Ears

## NIHL AS A PROBLEM

- Similar to recent measures to limit band student exposure to unhealthy heat and humidity, NIHL is a health and well-being issue that must be lessened or eliminated in our classrooms.

## SAFETY MEASURES

There have been many policy changes in schools when a health or safety issue becomes clear through research and advocacy. For example, lab safety equipment policies continue to be an area of research (Ménard & Trant, 2020). Another example is sports safety with regard to heatstroke has many schools examining their policy on when students must come inside (Scarneo-Miller et al., 2020).

## HEARING CONSERVATION MEASURES

There are hearing conservation measures proven to protect musicians' ears while performing in music classrooms. Hearing protection through musician earplugs, Sound Dampening Measures, Distancing Musicians, and Limiting Exposure (Auchter & Le Prell, 2014; Bockstael et al., 2015; Jin et al., 2013; Washnik et al., 2021; Wilson et al., 2013)

## WHY A POLICY CHANGE?

- In order to receive funding for hearing protection, future band classroom renovations, or other hearing conservation measures, there must be a policy in place that acknowledges the issue of NIHL and, in turn, states what safety measures must be considered or used.
- This policy change could be at both the micro (school/district) and the macro (state-wide) levels.

# CAN YOU HEAR ME NOW?

Policy Change and Protecting our Students' Ears

## RELATIONSHIPS WITH ADMINISTRATION

- Relationships with administration are built over time. There is no shortcut to trust from your principals and/or assistant principals.
- Access to administration varies, but always follow appropriate channels to access an administrator.

## RELATIONSHIPS WITH ADMINISTRATION

- Administrators appreciate being brought a solution when they are brought a problem.
- "If it's good for the students, we will do it."  
Remember, that administrators are primarily concerned with the well-being of students first.

## RELATIONSHIPS WITH ADMINISTRATION

- Know which "battles" to choose. Part of building a positive relationship with administrators, is knowing when something should or should not be brought to their attention.

## POLICY CHANGE MOVEMENTS

- Teachers CAN affect policy change in schools.
- When a problem in classrooms is discovered, teachers must get research and plans for a solution to the attention of the administration and other stakeholders in the community.

# CAN YOU HEAR ME NOW?

Policy Change and Protecting our Students' Ears

## POLICY CHANGE MOVEMENTS

- Policy change movements can and often do become political issues.
- Enthusiasm and knowledge of the problem are driving factors in gaining traction for a policy change in education.

## POLICY CHANGE MOVEMENTS

- Be vigilant in getting the facts in front of all stakeholders.
- Get your local representatives involved, too. Call and express why a bill should or should not be voted through.

## ROADBLOCKS

- Teachers have expressed that these roadblocks exist when advocating for policy change in schools:
  - Years of experience. Teachers expressed they feel more comfortable over time in advocating for policy change.

## ROADBLOCKS

- Knowledge of the issues they wish to fix with policy change. Teachers need the knowledge base to present reasons why policy change will benefit students.
- A poor or developing relationship with administration. Teachers expressed that without a strong relationship with administration, advocating for policy change is much more difficult.

# CAN YOU HEAR ME NOW?

Policy Change and Protecting our Students' Ears

## RECOMMENDATIONS

- Build as strong of a relationship with your administration as you can. Accept school leadership responsibilities as they come to you and don't be afraid to ask your administrators questions--learn about how everything works! Understanding your administrators' and their concerns will benefit you!

## RECOMMENDATIONS

- When you discover a problem in your classroom, do some research on the problem and possible solutions. Administrators and the community are going to want data, evidence, and potentially science to prove why this problem needs a solution.

## RECOMMENDATIONS

- When policy change movements present themselves, jump in and be a part of it. Even experience in changing a small policy will give teachers confidence to spearhead a policy change movement in the future.

## RECOMMENDATIONS

- Stay enthusiastic about the well-being of our students, especially in musical settings. NIHL is a real issue in our music classrooms, but there are other problems we will encounter, as well. Let's continue to make our music classrooms the absolute best and safest environment for our students!

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