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Minimizing Music Teacher Shortage in Public School in the U.S.

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Abstract

With the progress of society, people are paying increased attention to the development of education, including music education. However, every year in the United States, about half a million music teaching jobs remain vacant. The U.S. Department of Education has sought to change this by hiring new music teachers and finding ways to retain the best music teachers. Nevertheless, every school should know what factors are essential for music teachers. Recent studies have shown that pre-service music teachers think that administrative support, parental and community support, and program sustainability are the most critical factors. Students' socioeconomic status and the racial composition of students are the least important factors when new music teachers consider the job. However, these studies do not offer solutions to solve the shortage of music teachers. Therefore, the purpose of this research paper is to explore possible solutions to the problem of the shortage of music teachers in the United States. The preliminary results of this study reveal that the problem of music teacher shortage can be solved by administrative, community, and government support.

Keywords

Music education, teaching job vacant, music teachers, administrative support, parental support, community support, program sustainability, socioeconomic status, racial composition, administrative support, community support, government support

Introduction

No matter how society develops, education must be one of the most important issues, especially for arts education. According to the U.S. National Academy of Sciences (2013), art skill is one of the most useful skills. Students are in great need of art teachers; therefore, schools need art teachers. Regardless of temporary economic conditions, administrative factors, recruitment methods, or other factors affecting the education system, the demand for art teachers is universal.

In the past decade, the U.S. public school system has tried to provide high-quality music education for all students (Madsen, 2000). It has become a matter of special concern. For example, from the parents' point of view, each individual parent wants their children to receive a high quality education because parents know that music education will always be important. From the perspective of students, if they can receive high-quality music education, they will learn more knowledge. From the schools' point of view, if students can be provided with high-quality music education, they can not only improve the school's reputation, but also benefit from a high demand for the program. However, if the public school system wants to achieve this goal, schools need an adequate supply of music teachers. Therefore, a lot of schools

are constantly hiring new music teachers and finding ways to retain their most effective music teachers (Ingersoll, 2011).

In order to meet federal education requirements, students must have "high quality" educators. It is because teachers with rich experience and professional knowledge play an important role in maintaining the stability of the education system, creating a positive learning environment and improving students' learning. Therefore, many measures have been taken to improve the situation of music teacher shortage, such as alternative certification procedures, professional development opportunities, and induction programs (Ingersoll, 2011). Despite the efforts by these approaches to fulfil music teacher positions, there remains a constant shortage of music teachers. National estimates indicate that there are approximately 500,000 music teaching positions vacant each year (Hancock, 2009). The purpose of this study is to explore possible solutions to the shortage of music teachers in the United States. The results of this study reveal the problem of music teacher shortage in the United States can be solved by administrative, community, and government support.

1. Problem

1.1 Attrition, Mobility, and Turnover

A significant reason for music teacher shortage includes attrition, mobility, and turnover. According to the Learning Policy Institute (2008), “teacher shortage often occurs in key subjects without enough teachers” (p. 91). Much of this shortage is due to teacher layoffs during the Great Recession, “a rise in student enrollment, and a decline in teacher pre-service training programs, including music teachers” (McRobbie, 2001, p. 63). According to the American String Teachers Association and the National School Orchestra Association (2005), “43% of string teaching positions were vacant in 2004-2005” (p. 31). Furthermore, “Every year, there are still approximately 500,000 music teaching positions that remain vacant” (Carey et al., 2005, p. 76). According to Pembrook and Craig (2006), “Many studies have focused on specific types of music teachers, such as public school music teachers or elementary school music teachers” (p. 75). Further surveys show that only 16% of teachers leave their jobs each year as a result of retirement, and the other vacancies are because the remaining 84% are either quitting (attrition) or moving from one school to another (mobility) (Johnson & Birkeland, 2006).

Previous research has investigated the retention and turnover of music teachers. According to Shoup (2008), 20%-31% of music teachers said that they had interrupted their music teaching career at some point. Madsen and Hancock (2002) found that music teachers who taught in the same school had higher job satisfaction than music teachers who transferred from one school to another. Many factors affect the attrition rate of music teachers. Madsen and Hancock (2002) surveyed the retention and attrition of music teachers and found that music teacher turnover was 18% over a 5-year period, and 34% of music teachers in the sample quit the job after 6 years. According to this survey, the music education system experienced 11% mobility and 8% attrition in 2000-2001 (Madsen & Hancock, 2002). These percentages are significantly higher than non-art teachers. According to Combs (2008), “As soon as they accumulate some experience and get another job, they will be choosing another job” (p. 88). This is a very serious problem in the United States.

1.2 Effects of attrition, mobility, and turnover

In the beginning, researchers have focused more on the problem of attrition, compared to teachers’ mobility, which is far more damaging to the education system. However, current research shows that both music teachers’ mobility and attrition can bring about similar results: Disrupted education programs, reduced school cohesion and efficiency, and negatively impacted professional relations (Ingersoll & Smith, 2006). Attrition and mobility influence all academic areas, including music (Wychoff, 2005).

Music education majors face enormous challenges because American schools have lacked music teachers to teach for a long time. Recent social changes, such as the huge increase in enrollment, educational reform, and economic expansion, have a negative impact on the existing teacher structure, causing an imbalance in supply and demand. It makes the shortage of music teachers become increasingly problematic. Music education in some parts of America still lacks music teachers, so 50% of professional positions are still vacant (Hamann, Gillespie, & Bergonzi, 2006; Nielson, 2006).

Social and academic studies of school conditions show that schools that provide teachers with student-teacher interaction, teacher professional development, and material resources can retain more music teachers (Johnson & Birkeland, 2005). However, schools with inadequate administrative support, poor student discipline, and low learning influence retention of music teachers. Young music teachers are more likely to leave their teaching position than older music

teachers (Guarino, Santibanez, & Daley, 2006). One of the reasons for the high turnover rate of music teachers under the age of 40 is due to the fear of low salaries (Guarino, Santibanez, & Daley, 2006). In addition to the effects of attrition, mobility, and turnover, other characteristics like personal, environmental, and other music-related factors will influence the decision of music teachers.

1.3 Personal, Environmental, Other Music-Related Factors

Personal, environmental, and other music-related factors play an important role in the retention of music teachers. Some scholars (Clayton et al., 2008) have proposed that personal factors, (such as salary, commuting time, and family support), environmental factors, (such as class sizes, school facilities, and administrative support), and other music-related factors (such as teaching workload, course schedule, work deadlines, limited job recognition, and lack of support from peers) will influence the career choice of music teachers.

School characteristics and work environment have a great impact on teacher turnover rate and reveal several complex relationships (Darling-Hammond, 2007). For example, when cities recruit teachers to work in remote areas, then other schools will face the loss of teachers at the same time. Moreover, music teachers who worked in urban schools were able to stay in the teaching position for a longer time than music teachers in remote areas and rural schools. It shows that music teachers still attach great importance to the school environment (Merrow, 2005).

Moreover, some conditions cause music teachers to quit their jobs, such as being assigned to teach the class that they are not prepared for, terrible student discipline, and low salaries (Haycock, 2006). Killian and Baker (2006) found several studies that suggested that financial reward is a consideration for all teachers, including music teachers. In fact, teachers' salaries that are above or below the national average will affect the duration of teachers' career (Alley, 2008). Of course, increased salary will indeed increase the duration of teachers' jobs (Gifford, 2010), but according to Lankford, Loeb and Wyckoff (2005), a higher salary cannot solve all the problems that teachers face. Therefore, income is not the most crucial factor in teacher retention. Recent research has shown that pre-service music teachers consider administrative support, parent and community support, and the sustainability of programs as the most important factors.

2. Data Commentary

In a survey conducted by Snyder (2016), 25 participants responded to 15 statements related to the music teacher shortage in the United States. Participants were asked to respond to the following statement related to the shortage of music teachers in the United States: “income is an important factor for new music teachers.” The results are provided in Figure 1 below.

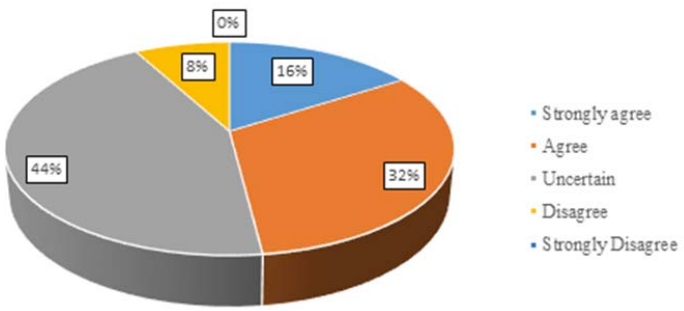

Figure 1. Income is an Important Factor for New Music Teachers.

Figure 1 presents the participants' opinions on whether or not income is an important factor for new music teachers. As can be seen, almost a half of the participants agreed that income is an important factor for music teachers. Slightly more than two-fifths of the participants expressed uncertainty about income as an important factor for new music teachers.

Similar results have been shown in a study conducted by Horng et al. (2005). The study showed that salary ranked in the middle of music teachers’ concerns. In other words, the salary is not what music teachers’ value most when they choose a job. Moreover, Baker (2006) reported that music teachers prefer to stay in a school with a high salary, but the salary is not the most important factor when music teachers choose to work. Therefore, income is an important factor for music teachers, but it is not the most important factor.

2.1 The Relationship between Music Teachers and School Administration

In the same survey by the Stoupel (2016), participants were asked to respond whether or not the relationship between music teachers and school administration will determine the length of time they will remain in a position. The results are shown in Figure 2 below.

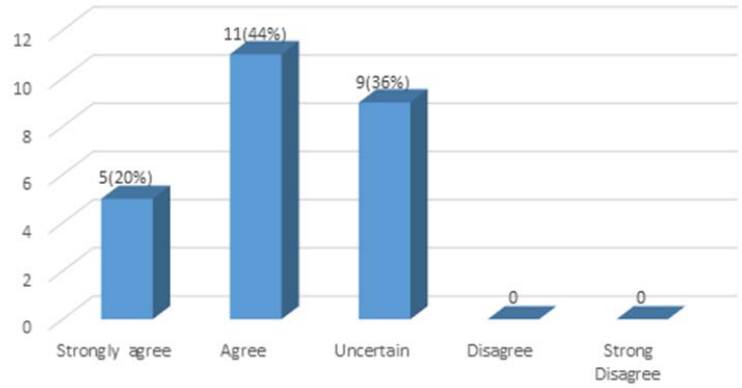

Figure 2. Relationship between Music Teacher and School Administration.

Figure 2 reveals the participants' awareness regarding the relationship between music teachers and school administration in a public school in the United States (Gifford, 2010). As can be seen, almost two-thirds of participants agree that the relationship between music teachers and school administration will determine the length of time they will remain in a position. In addition, less than two-fifths of participants are uncertain that the relationship between music teachers and school administration will determine the length of time they will remain in a position. One possible reason why participants are uncertain that the relationship between music teachers and school administration will determine the length of time they will remain in a position may be due to whether they are not sure this relationship will determine how long a music teacher stays on the job. Another possible explanation could be that they did not realize the importance of the relationship between music teachers and school administration will determine the length of time they will remain in a position (Fischer, 2011).

The similar results have been shown in a study conducted by Johnson and Birkeland (2009), who reported that pre-service music teachers believed that the relationship with school administrators is very important. Moreover, school administration was rated significantly more important than any other factor (Gardner, 2010). Therefore, the relationship between music teachers and school administration is very important for music teachers to remain in their teaching position.

3. Proposed Solutions

3.1 Administrative Support

The first solution to the music teacher shortage is administrative support. Support from school administrators and stakeholders helps retain new music teachers. As Combs (2003) asserted, I used to have a lot of friends around me, but now I am often alone, and I am very happy to have someone to help me when I meet difficulties in work (para. 4). A lot of young teachers go from having a lot of friends to just being on their own, and there is a psychological gap, so help from colleagues, or help from administrators, can help a lot of young music teachers. For example, the most basic work is done by new music teachers in K-12. It is very difficult to teach K-12 music because music teachers are responsible for all the content. For a first-year teacher with little experience, such a requirement is very difficult to achieve. K-12 is the first step for music teachers to enter the profession, and these positions are usually filled by young, inexperienced teachers (Zimpher, 2007). Therefore, these new teachers often feel under tremendous pressure, but if they can get help from the school administrators or colleagues, it will play a supporting role for their psychological well-being. According to a recent report by the Berklee College of Music (2016),

> The average musician earns $55,561 per year. More than half of all respondents reported generating income from three or more different jobs. This sentence asserts that it takes a musician three jobs to make that

much money, so it's a very small salary per paycheck. (Para. 8)

Thus, many music teachers quit their jobs because of low salaries. Moreover, some music teachers teach both vocal music and piano. According to Saint Joseph's University (2012), most teachers give several lessons to students in one grade. Music teachers usually give a variety of lessons to students of all ages in their school, so the new music teacher's job is very stressful. This phenomenon leads to many new music teachers to leave their teaching positions after finding more suitable jobs.

Currently, music teachers are overworked. If school administrators or other stakeholders can help the new music teachers or can help new music teachers reduce the class schedule, it would make the daily work more enjoyable and reduce music teacher turnover.

3.2 Induction Courses

Furthermore, using the induction courses is the first step to reduce the music teacher shortage. It is a systematic training for new employees, which is to help new employees to engage in their work tasks in the future. Teacher turnover has been a persistent problem in American schools, and over the past several decades, researchers have looked at whether induction training programs can help retain music teachers. Music teachers should receive pre-service training that includes induction courses. Pre-service training is important for teacher education programs so that they can perform better in the classroom (Fajet et al., 2005). It is because it gives new music teachers the opportunity to gain experience, develop relationships with other new teachers, and receive feedback from administrators and colleagues. For example, California has a double certification system for all teachers, including music teachers. By completing compulsory courses, class skills and working abilities, teachers can obtain preliminary teacher certificates (Fajet et al., 2005). In addition to the first preparation, there is a second preparation.

The second stage of preparation is to guide new music teachers in their first and second years of teaching. In reality, many of the new teachers are students who have been working after they graduated from school, so a lot of them have high expectations about work. However, they are still very unfamiliar with the work content. When they find the gap between reality and the ideal, they have no way to go on working. In fact, many schools use multiyear induction programs. In the first year, new teachers will be in the same grade or content area with their mentors, understanding students' learning objectives and beginning to build relationships with them. New music teachers are required to attend after-school meetings throughout the school year. The focus of these meetings is basic issues, such as parent communication, differentiated teaching, classroom management, work-life balance, and reflection and goal setting. In the second year, the goal of new music teachers is to teach, listen to other new music teachers' courses, and summarize and try to give teaching strategies or teaching models (Fajet et al., 2005).

The purpose of the induction course is to introduce the new music teacher to the position's culture, procedures and expectations (Boe et al., 2007). The course has five objectives: (a) to improve teaching efficiency, (b) to improve teacher retention, (c) to promote the personal and professional welfare of new music teachers, (d) to meet state or regional requirements, and (e) to spread the culture of the education system to new music teachers (Haycock, 2006). The research revealed that this program can help music teachers develop their strengths, thus extending the teacher's career, and make the local education system develop sustainably. According to Tew (2018), induction programs can reduce music teacher attrition. In addition to administrative support, community support is another way to deal with the music teacher shortage problem.

3.3 Community Support

The second solution to the music teacher shortage is community support, which includes connecting retired teachers with new teachers in the state. For example, The Montana Music Educators Association has a mentorship program (McCann & Johannessen, 2007). The aim of the project is to promote communication among colleagues and to provide the best employment plan according to the requirements of participants. The community can invite retired music teachers to explain the reasons for their career choices. According to Frommer (2006), retired music teachers have contributed significantly to the career of new music teachers. This approach could significantly impact young musicians and could help them to continue their job and encourage retired music teachers to call or email the new music teachers in the local area to help them. This kind of communication can benefit the community, the retired teachers, and the new music teachers. According to Stone (2016), mentoring new music teachers can provide for lifelong success in the profession. Therefore, mentor programs could benefit new music teachers.

Furthermore, resource-poor cities and rural areas often face a more serious shortage of teachers. Several local com-

munities have opened local recruitment programs to hire teachers, including music teachers (Gardner, 2017). The National Association of Music Merchants is part of a community program, which is the best community program for music education (Carlsbad, 2018). This program can improve the reputation of the school and reward the educators of music education. According to Luehrsen (2018), annual community support can help reduce the loss of teachers. For example, the community program of Athens High School in Athens, Georgia offers the SupportMusic Merit Award, which brings many benefits, one of which is job security (Purdy, 2016). As Zografos (2015) asserted:

> While many other departments in our region are laying off workers, the music department has remained stable, because we have fantastic community support, increased with the announcement of our support for the music excellence award;
>
> It is really a career saver. (p.44)

Thus, community support can help reduce the loss of music teachers. In addition to community support, government support is another way to reduce the loss of music teachers.

3.4 Government Support

Finally, government support could contribute to ending the music teacher shortage. According to NAMM (2017), in 2007, the U.S. Department of Education proposed $56.5 billion for arts education. When students graduate from school without a stable income, they are in great need of help, and they need to pay for everything in life by themselves. Many new music teachers are renters, so rent is a significant expense. The local government can provide affordable housing for new music teachers. This support would save new music teachers money.

In certain urban areas, some school districts lack qualified music teachers, so the government can allow schools to temporarily hire music teachers without certificates. In order to obtain a temporary license, applicants must usually have a bachelor's degree in the subject they want to teach, and must begin attending teacher preparation classes to meet the requirements of national certification. According to Kaplan (2016), the schools in poor areas have led to the hiring of non-certified teachers. As Professor Lindeman (2013) asserted:

> A surprising number of teachers, including music teachers, have been awarded emergency certificates as a result of California's severe teacher shortage. Because there were not enough qualified teachers, the district hired almost any enthusiastic teacher. Many of these teachers are good musicians, and other people think music teaching is just a temporary job, and they will keep doing it until better jobs come along. (p.99)

Moreover, the government can provide incentives to encourage new music teachers to teach in rural areas. Furthermore, the government could give them some support, such as subsidies for rent, commuting expenses, food subsidies and so on. This support will extend the music teacher's time in the teaching position. According to the National Association for Music Education (2017), the administrative structure of federal education spending has just undergone a major change. As this structural change becomes apparent at the state and local levels, government support helps support music education. In other words, if the government can provide funding for music education, then the school can use the money to help all the teachers, including music teachers. In addition to the government support, these solutions also have many advantages.

4. Evaluation/Analysis of Proposed Solutions

The problem of the music teacher shortage has existed for a long time. There have been many previously proposed solutions to solve this problem, such as raising salaries, reducing the workload, and transferring music teachers from another place. However, all these solutions have problems. None of these solutions have been tested over time, because these solutions lack adequate investigation. These solutions may have problems. Nevertheless, these problems can be solved by community, administrative, and government support. The following sections address the possible benefits and limitations of the proposed solutions mentioned above.

4.1 Benefits

Firstly, community support can bring many benefits to music teachers. For example, retired music teachers provide help to new music teachers, which will not only benefit their own reputation, but also contribute to music education. Because retired music teachers have much work experience, they can give some ideas about work when music teachers encounter difficulties. They also can increase their reputation. For example, when a retired teacher often goes to help

the new teachers in school, and there are many new teachers in the school every year, the retired teacher can often help many new music teachers. The new teachers will know the retired teacher, and then the reputation of the teacher will increase.

The support from school administrators and colleagues can still help the new music teachers in their work. Boe et al. (2007) found that when teachers had a good relationship with their supervisors, it had a significant impact on their career and they were more likely to stay in teaching positions. This includes music teachers.

Secondly, an induction program can enhance music teachers' competence and provide training in advance, which can not only extend their time in the teaching position, but also improve the teaching efficiency of the school (Elfers, Plecki, & Knapp, 2006). Through the induction program, music teachers know how to deal with difficult problems, which will play a very important role in the formal teaching of music teachers. The result of this program also can save money. When hiring new teachers, schools need to select the music teachers who are suitable to school, prepare the forms that new music teachers need to fill out, and support the classroom to have an interview. These activities will use many teachers in the school, and when these activities start, many of the schools' teachers need to stop their own lecture to help. Moreover, multiyear induction programs can make music teachers confident in their teaching work. When a music teacher is confident in their future, they will try their best to do well in their career. It also helps teachers stay on the job longer.

Lastly, government support can make the whole plan (such as offering affordable housing, subsidies for rent, commuting expense) more efficient and make the plan that retains music teachers more sustainable. Moreover, government support also helps to redistribute music teachers. For example, many schools are in remote areas, and music teachers are very reluctant to go to remote areas, because of the bad quality of life, poor learning ability of students, and terrible school equipment in remote areas. These factors will lead to many music teachers who are not willing to go to remote areas. Nevertheless, there are many policies the government can use to encourage music teachers to teach in remote areas. These policies also play an important role in a country's educational balance. Despite the potential benefits of these proposed solutions, there may be some potential limitations.

4.2 Possible Drawbacks/Disadvantages

Trying to find some solutions that fully address the problem of music teacher attrition and mobility are challenging because the specific reasons are only partly understood.

Firstly, the mentoring program has some weaknesses. For example, it lacks a consistent timetable for mentoring, inadequate preparation and training of mentors, and some students match with mentors from different fields. For example, some mentors major is piano performance, but they also teach music history.

Secondly, induction programs may lead to competition between teachers and fail to meet their personal development needs. Teamwork is inevitable in induction programs. If the number of music teachers in induction programs is divided into two parts, there will be only one winner in the end. The two teams will inevitably compete. Nevertheless, if the competitive atmosphere is not good, it affects the relationship between music teachers. Then retention of music teachers will be influenced.

Lastly, the government may not have sufficient financial resources to provide affordable housing, and the process of allocating music teachers is also very complicated. In addition to providing some policies, the government also needs to consider the willingness of music teachers. Thus, government support is problematic.

In general, few studies have taken these factors (such as role conflict, lack of management support, and job stress) into account as predictors of music teacher retention, nor have they considered the effects of existing teacher structures, school characteristics, and school demographics (Elfers, Plecki, & Knapp, 2016).

5. Conclusion

In conclusion, teachers are the backbone of a school. The quality of teachers is a very important factor in school education, especially music teachers, because music teachers can play a significant role in the growth of students' lives, cultivate students' imaginations and aesthetic tastes, and lay the foundation for students' lifelong development. Before understanding the phenomenon of music teacher shortage in the United States, it is necessary to know what factors music teachers will consider when they choose their career. Moreover, new music teachers believe that administrative, parental, and community support are important factors that influence their career choice. The racial composition of students is the least important factor when they consider their future career.

Furthermore, some possible solutions are given. These proposed solutions include administrative, community, and government support for the music teacher shortage. The community support can help the new music teacher connect

with the local retired teachers, significantly help the new music teachers, give much advice and offer professional development to the new music teachers. The administrative support can help music teachers prepare for future career work. The induction program can not only help to extend the job time of music teachers, but also can develop new music teachers' many skills, such as teaching skills, interpersonal skills with students and colleagues, and time management. The government can provide affordable housing and support some financial subsidies for the new music teachers, which will encourage new music teachers to commit to remain at one school for the long term.

Hopefully, the results of this research can help retain music teachers, reduce teaching vacancies, and have a positive impact on music education in the United States. This study reveals the employment factors that may cause music teachers to consider their future career and also gives corresponding solutions. This is conducive to the distribution and retention of music teachers' resources in the United States. These solutions may not have been fully tested, but the financial and learning costs associated with the departure of music teachers are very high. Today the loss rate of music teachers is still growing, and no significant high-impact solutions have been found. Therefore, it is hoped that this study will make a positive contribution towards solving the music teacher shortage problem.

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