

Roots and Wings:

**A Look at How Performing Arts Integration
Can Help Students Soar**



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Date

DEDICATION AND ACKNOWLEDGEMENT

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ABSTRACT

In schools across the country, arts education programs are diminishing in order to make room in the curriculum for lessons that will prepare students for their college and careers. The teacher-researcher behind this study noticed that her students were engaged when exposed to arts integrated lessons and wondered if arts integrated lessons could give her students the skills that they needed to be successful in the future. Based on her initial classroom observations and a review of literature on the subject matter, she decided to do an action research study addressing the question: Is performing arts integration an effective tool for building my students' competence in 21st Century Learning and Innovation Skills?

This study focused on a class of 5th grade students who worked over the course of a six-week period to put together a musical production called "American Revolution." The students were assessed prior to their first rehearsal and at the commencement of the show using a rubric that measured 21st Century Learning and Innovation Skills, such as communication, collaboration, critical thinking and creativity. Data was also collected from teacher observations and student journal entries.

Major findings from both the quantitative and the qualitative data showed that 5th grade students of both genders, and a variety of academic levels, improved in their ability to use 21st Century Learning & Innovation Skills when they were involved in performing arts. The teacher researcher discussed reflections what her role as an educator will look like now that she has gained this valuable insight into the benefits of performing arts integration. Overall, the study provided meaningful data in favor of integrating the arts in the classroom.

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INTRODUCTION

The American writer and politician, William Hodding Carter once said, “There are only two lasting bequests we can hope to give our children. One of these is roots; the other, wings.” As an educator, I have worked year after year to provide my students with the “roots” that they need to be successful-- the roots of content mastery. At the commencement of each school year, I have been able to look back on my students’ growth and have always felt successful in my ability to help them develop their roots. By June, all my students have mathematical facts, historical dates, and grammar definitions, and other grade level standards deeply rooted within them. However, I am always left wondering how much success my students will find outside my classroom after mastering their content standards. Will their roots help them get where they need to go in order to be successful later in life?

I know from my own life experiences that content mastery, alone, will not lead to success. In my life, I have found success with meeting the demands of higher education because I was adept at critical thinking. I have found success in my career because I knew how to collaborate and be creative. And I have found success in my personal life because I am skilled at communication. It is these skills, communication, collaboration, critical thinking and creativity, along with content knowledge, that have helped me achieve my greatest successes in life. It is these skills that I know will give my students the “wings” that they need to soar in life.

So, as a professional educator I am left with a problem: How can I give my students both roots and wings? How can I mold the curriculum to meet their needs so that they will acquire content knowledge, while also developing their life skills? The following study provides thoughtful insight into these questions by examining the use of performing arts integration as a teaching tool in the classroom.

BACKGROUND

Personal Context

When I was in the 5th grade, my teacher announced that our class was going to be staging a production of William Shakespeare's *Midsummer Night's Dream*. Even though I was excited about the opportunity to be involved in the class project, I was also a little apprehensive. I had never been involved in a play before and had no concept of what it took to put one together. I was also a shy student and felt nervous about being on stage. Our class was given the opportunity to read the script and audition for our teacher. I auditioned for the role of Peaseblossom, one of the fairy queen's attendants because I thought it might be fun to wear a fairy costume. My teacher, however, had a vision of me in a different role, and cast me as the lead character in the show, Puck.

Puck, the mischievous sprite who set all of the play's conflicts in motion with a magic potion from a flower, was a challenging character to portray. Not only did I have to memorize a lot of lines in Shakespearean tongue, but I also had to stay on stage for the majority of the show. There was a lot of humor in my lines that I had to understand in order to deliver them correctly and make our audience laugh. My character had interactions with most of the other characters in the play, so I also had to learn how to cooperate with my classmates on stage. Yet, I embraced the role and the opportunity for a challenge. I tapped into my imagination and brought the role of Puck to life on that stage.

Little did my teacher know at the time that by giving me the chance to play Puck in our class' production, he was setting the stage for many of my future choices. I stayed involved in theater in both junior high and high school, and I even went on to major in Dramatic Arts at the University of California at Santa Barbara before getting my teaching credential. After earning a

Multiple-Subject and Single-Subject: English Teaching Credential, I applied to the California Commission on Teacher Credentialing to obtain a Supplementary Credential in Dramatic Arts, with the hope of one day having the opportunity to teach a performing arts class. In the last decade, however, the arts have been on a steady decline in our schools and performing arts job opportunities are difficult to find.

In my current position as a 5th grade GATE teacher in southern California, I have tried to integrate performing arts into my lesson plans whenever possible. For example, last year when I taught persuasive writing, my students had to write speeches from a character's point of view and present their speech in front of their peers. This year, when my students learned about extreme weather systems in science, they had to write and perform songs about them in front of the class. Each time that I have worked to integrate performing arts into my classroom, I have been reminded of my first experience with performing arts when I was in 5th grade. I can recall how my confidence and communication skills were built up by collaborating with my peers and how I was able to foster my creativity. It is a glimpse of these things that I have seen in my own students during our few arts-integrated lessons.

I began to wonder just how effective these performing arts integrated lessons were helping my students build essential learning skills. I already knew that arts programs had declined in our schools, but I wondered why there were not more classroom teachers attempting to integrate the arts in other subjects. It is these questions that I wanted to explore through my action research study, so that I could determine how effective performing arts integration is as a teaching strategy for giving my students the skills they will need to be successful in the future.

Review of Literature

With the implementation of the new Common Core State Standards across the nation, educators and policy makers are shifting all of their time and resources towards what they consider to be core academic subjects, reading, writing and arithmetic, and away from the visual and performing arts. Despite current research that clearly states the benefits of arts integration in education, the arts are slowly eroding from our schools. In conjunction with Common Core, there is a push for educators to focus on 21st Century Learning and Innovation Skills-- communication, collaboration, critical thinking, and creativity-- in order to better prepare our students for their future in college and in their careers. However, many researchers would assert that arts integration actually helps students build their competencies in the 21st Century Learning and Innovation Skills.

To begin with, there is ample research that affirms the deterioration of arts education in today's schools. Over the past couple of decades, the arts have been on a steady decline for a variety of reasons. One rationale for cutting back on arts education is that educators are faced with budget cuts, increased class sizes, and a shortage of instructional minutes (Hathaway, 2013). Even more pressing has been the demand by policymakers for increased academic achievement and accountability in English-Language Arts and mathematics. Since the No Child Left Behind Act of 2001, educators across the country have felt the pressure to have their students perform well on standardized tests. As a result, teachers have predominantly focused their instruction on those areas that are to be tested each year, English-Language Arts and mathematics, forsaking any instruction in the arts (McCoy, 2007).

With standardized testing taking center stage, arts education has not been able to find its place in the spotlight. In fact, a vast majority of the public has come to view arts curriculum as a

trivial indulgence. Gould (2005, as cited in McCoy, 2007) claims, “The media reinforces an adversarial relationship in which arts education only gets in the way of teaching ‘real’ subjects that students need to master in order to succeed” (p. 30). Due to this type of thinking promoted by media, the general public, and policymakers, many educators have also come to view the arts as a frivolous subject that is devoid of valuable skills (Kindelan, 2010).

In addition to pushing core academic skills, there has also been a push in recent years for a new skillset, known to educators as 21st Century Learning & Innovation Skills. These skills, which focus on communication, collaboration, critical thinking, and creativity were outline in a Framework by the Partnership for 21st Century Skills; also known as P21. The objective of P21 is to create learners who will have success both now in the classroom, and in their future as career-oriented adults (Heath, 2010; McCoy, 2007). Educators agree that today’s students must be taught the skills needed to work and live successfully in our 21st Century domain (Taylor, 2011). In order to thrive in the future, our students will need to know how to think and how to articulate their thinking, not just how to answer a multiple choice question on a standardized test (Fowler, 1994).

In spite of the emphasis on 21st Century skills, the arts are still being cut. The Partnership for 21st Century Skills calls for improving our students’ skills in communication, collaboration, critical thinking, and creativity, and some researchers have noted that these 4C skills are essentially art skills. Taylor (2011) asserts, “The irony is rich, since the very skills their children will need to be capable adults can result from arts practice” (p. 22). Some researchers have noted that it would make sense, then, for the arts to be integrated into education in other content areas.

There are many reasons why the arts should be integrated into the education. Some of the benefits that researchers have found are that arts integration helps students achieve academic

goals. Students enrolled in arts programs have higher test scores in reading and in math. In addition, the arts help to motivate learners, reduce stress and to promote self-discipline (McCoy, 2007).

Integration has become popular term in education today, for educators and policymakers alike. With integration, curriculum designers have the opportunity to interlace several different concepts together and provide more meaningful educational experiences for students (Riley, 2012). Although integration is a popular approach for implementing new Common Core standards, most of the integrated lessons are designed in conjunction with STEM: Science, Technology, Engineering, and Mathematics.

However, many researchers would argue that STEM, alone, is not the answer for developing students who are ready for the 21 Century workforce. They emphasize the need for merging the arts with STEM, and producing STEAM lessons (Maeda, 2012; Robelen, 2011). These researchers show that when the arts and sciences are intersected, students will learn how to be creative, divergent thinkers and ultimately grow into the future innovators of America. In 2008, Robert Root-Bernstein of Michigan State University studied the relationship between the arts and STEM fields and discovered that scientists who had won the Nobel Prize were twenty-two times more likely to be enmeshed in the performing arts than other scientists in similar fields (Robelen, 2012). Indeed, the Partnership for 21st Century Skills argues that, “the arts are among society’s most compelling and effective paths for developing 21st Century Skills in our students” (Dean, Ebert, McGreevy-Nichols, Quinn, Sabol, Schmid, Shauck, Shuler, & P21, 2010, p 2).

In order to give our students a more comprehensive education that prepares them for the future, we must begin looking at the ways in which the arts nurture the 4C skills.

Communication

As described in the 21st Century Skills Framework, communication is the ability to articulate ideas lucidly through both speaking and writing (Dean et al., 2010). The arts provide students with the opportunity to communicate clearly in a variety of ways. After studying a piece of visual art or watching a performing arts presentation, students can communicate their thoughts and feelings in response to the art (Fowler, 1994). Even more powerful than that, is the idea that after studying a new concept in social studies, math, or science, students can use the arts as their vehicle for communication, itself. They can write a piece of poetry about a time in history, compose a song about fractions, or paint a picture to show the effects of severe weather conditions. By communicating about the arts, or using the arts as a means of communication, our students will learn how to explain their thoughts and justify their reasoning, which are the expectations set by Common Core State Standards (Riley, 2012).

Collaboration

Often intertwined with communication, collaboration skills are defined by the 21st Century Skills Framework as the ability to work successfully in a team and to be flexible when working towards a mutual goal (Dean et al., 2010). Exposure to the arts offers students a chance to experience successful collaboration, first-hand. In a visual or performing arts classroom, students collaborate with peers by giving each other feedback, such as constructive criticism (McCoy, 2007). In a regular education classroom, collaboration often happens between the general education teacher and the art teacher in order to align arts curriculum with other standards and create an arts integrated lesson that is both engaging and meaningful (Riley, 2012).

Critical Thinking

The 21st Century Skills Framework maintains, as most educators do, that critical thinking is the ability to analyze and solve problems reasonably (Dean et al., 2010). The arts, unlike other

core subject areas, do not ask for students to come up with just one correct answer to a problem. Rather, in visual and performing arts classes, students learn that there can be many correct responses to a question. This experience teaches students to be atypical thinkers who can solve problems in new and exciting ways (Fowler, 1994). When the arts are integrated into STEM curriculum, students use the same problem-solving and critical thinking skills to build and design projects in the classroom that many of our country's top technology and engineering companies use to build and design products for the world (Maeda, 2012).

Creativity

Creativity is summarized in the 21st Century Skills Framework as the ability to show originality, innovation and open-mindedness (Dean et al., 2010). The link between creativity and the arts is perhaps the most obvious. In practicing the arts, whether visual or performing, students develop their creativity and imagination. Arts teachers encourage students to express themselves, take risks, and make mistakes in their lessons and activities (McCoy, 2007).

Creativity is a mental capacity that is also useful in arts integration. Students who read a particularly complex piece of literature, or excerpt from a history text, can help make sense of it by illustrating it or by acting it out in a performance. This aptitude for using creativity in order to grasp a complicated idea is the type of skill that children will need in order to contribute positively to our society when they become adults (Kindelan, 2010).

Clearly, there are plenty of researchers out there who believe strongly in the idea that the arts nurture the 4C Learning & Innovation Skills of the 21st Century. However, most of the research done concerning the benefits of arts in education has been done in specialty schools, or in colleges across the country. Both the Blue School in New York City which was started by the Blue Man Group, and the Drew Charter School in Atlanta which was founded on STEAM

principles, have reported a boost in students creativity and collaboration skills along with an increase in reading and math scores (Maeda, 2012). In 2003, case study conducted at Northwestern University examined the critical thinking skills that students can develop by participating as dramaturgs for a school play (Kindelan, 2010). In Kindelan's study, she found that by contributing to the performing arts production as a dramaturg, students would not only enhance their critical thinking and analytical skills, but also improve their leadership skills.

In addition to the STEAM schools and universities who have studied the benefits of arts integration for students, there has also been a recent study regarding the benefits of arts training for teachers. In New Jersey, Glen Rock School District funded a three-year professional development program to help teachers learn how to fuse the arts into their classroom and expand their grasp of how children learned new ideas (Amorino, 2008). Amorino describes how over the course of the program, twenty-six Glen Rock teachers learned how to explicitly teach creativity in their classrooms, as opposed to just instructing their students to "be creative." After completing their training, the teachers involved in the program revealed that they saw remarkable growth in their own students' abilities to think creatively and form original ideas.

Although the aforementioned studies provide some valuable data on the relationship between arts integration and 21st Century Learning and Innovation Skills, it must be noted that each of these studies was conducted with adults or with children enrolled at an alternative education school. Moreover, most of the peer-reviewed research on the connection between the arts and 4C skills is theoretically based, and lacks the support of action research from a traditional elementary classroom. Even though these education researchers believe that the arts are a useful resource for developing 21st Century Learning Skills in students, there is little empirical data to reinforce their beliefs. This makes a strong case for further exploring the effects

of arts integration in the classroom. Thus, it is the goal of this study to examine if arts integration, specifically performing arts, is an effective tool for building my students' competence in 21st Century Learning Skills.

Assumptions and Beliefs

One of my fundamental beliefs about education is that the learning environment should be collaborative and experiential. I believe that all children should be active learners. The curriculum in my classroom is always delivered in ways that involve observing, touching, investigating, making comparisons, predicting, and an infinite number of other active learning techniques. By making learning active, my students are able to work together with each other towards accomplishing their given academic tasks. I can see the benefits of experiential, collaborative learning both in my classroom and on the playground.

Due to my background in performing arts, I also have some fervent beliefs about the importance of arts in the classroom. Through my experiences in theater, I outgrew my childhood shyness, overcame my fear of speaking in public, tapped into my creative side, and learned how to work better with others. So, based on my educational philosophy and my personal background experiences, I began this action research project with a strong belief that the arts are essential to developing the skills that one needs to be successful in life. I believe that the arts are imperative to education and should be integrated into the other core subject areas.

Research Question and Approach

It is the intent of this action research project to study whether or not performing arts integration is an effective tool for building my students' competence in 21st Century Learning

and Innovation Skills. As part of my action research project, I directed my students in a musical production called “American Revolution.” During the course of the production, I collected both quantitative and qualitative data to help me answer this question.

STUDY DESIGN

Participants Selected

As previously mentioned, most of the peer-reviewed research on the connection between the arts and 4C skills is theoretically based, and lacks the support of action research from a traditional elementary classroom. Therefore, all of the students who were selected to participate in this study were students who were currently enrolled in a public elementary school classroom.

As the teacher-researcher for this study, I analyzed students who were enrolled in my 5th grade class in southern California. At the time the study was implemented, I was completing my thirteenth year of teaching. I possessed a clear multiple-subject teaching credential, a clear single-subject English teaching credential, as well as a supplementary credential in dramatic arts. In addition to my credentials, I was also certified to teach GATE (Gifted and Talented Education) classes.

At my school, there was one GATE clustered classroom at each grade level. This means that all of the GATE-identified students for that grade level were clustered into one teacher's class. The remainder of the class was filled with students who were academically motivated, have outstanding work ethic and good study skills. My class, which was used in this study, was the GATE clustered class for 5th grade at my school. Within the class there were 34 students; 18 boys and 16 girls. Of the 34 students, 20 of them were GATE-identified; 11 boys and 9 girls. This is important to note because most GATE-identified are students are inherently proficient at critical thinking and creativity, which are two of the four learning skills being examined in this research study.

Prior to the commencement of the study, I briefly explained the nature of the research study to my students. I created permission slips to send home with each student in order to get their parent's permission to participate in the research study. The permission slips were sent home to parents in both English and Spanish, in order to accommodate parents whose primary language was not English (See Appendix A). There were no incentives offered to the students in regards to returning signed permission slips. All 34 students' parents signed and returned the permission slips in favor of their children participating in the study.

Setting for the Study

The study was administered over the course of a six-week time frame. There were two locations used in the study. The first location used was in my classroom. Within the classroom, the students all had assigned seats. The seats were arranged into collaborative groups, with four desks at each group. There were a total of nine groups. I designed a seating chart to place students into groups based on their role in the performing arts production. So, students whose characters shared a scene in the play were placed together in collaborative groups for the duration of the research study.

The second location was in the school's media center. The media center, which functions as a library as well as a performing arts space, had a stage at one end of the room. The stage had six risers on it. Each riser had three levels on it for students to sit and stand on during the performing arts production. I designed a seating chart for the risers, as well, in order for students to be seated near the other characters from their scene in the play.

Activities for the Participants

Prior to data collection, I asked my students to audition for our class' performing arts production. All the students were guaranteed a role in the production, but were still required to audition as a pre-assessment of their performing arts talents and their "21st Century Learning & Innovation Skills." For their audition, the students selected a partner and a Shel Silverstein poem from Where the Sidewalk Ends or A Light in the Attic. Together, the students and their partners worked to memorize the lines of the poem and to determine the most creative method of presenting their poem. The students were given twenty minutes a day, for four days to rehearse for their auditions. On the fifth day, the students auditioned for me by presenting their poems in front of the class.

Along with their poetry presentations, students were asked to complete an audition application. The application asked students to communicate what type of role they would prefer to have in the performing arts production: lead, supporting, or ensemble. Additionally, the application asked students to justify why they thought I should consider them for the role that they preferred. Finally, the application asked students to list any previous performing arts experience that they had in their pasts. Out of the 34 students in the class, 23 had some previous experience in the arts; 11 boys and 8 girls played an instrument in our school's instrumental music class, 2 girls participated in folklorico dance classes outside of school, and 1 girl belonged to a children's choir in the community. This is important to note because the students with previous performing arts experience had already been exposed to situations outside of this research study where they might have used some of the 4C learning skills.

After the auditions, I assigned each student a role in our performing arts production, "American Revolution." I purchased this musical production from the company Bad Wolf Press

for \$39.95 (Fink & Heath, 2003). The cost included a script, a teacher's guide and an audio CD with all the songs recorded twice: first with voices singing so that the students could learn the songs, and then without voices so that my students could perform in our final production without other voices singing along. I photocopied the script and made copies of the CD for each student. I also gave each student a rehearsal schedule for the six weeks of the research study (See Appendix C).

During the first week, my students did not do any activities with the "American Revolution" script or music. Instead, I introduced the 21st Century Learning and Innovation Skills to the class. I provided the students with a brief inventory to assess their prior knowledge about the 4C skills (See Appendix B). Then I provided a definition of each of the learning skills, so that the students would begin to understand how they would be assessed during the course of the research study. I also arranged several performing arts activities for each day of the week that would explicitly teach and disclose each the 4C skills to my students.

On Monday, we focused on communication. I defined communication for the students as "sharing thoughts, questions, ideas, and solutions" (Reynolds, Fablevision & P21, 2011). We played three improvisational acting games that emphasized communication skills. First, we played *Roll an Emotion*, which taught the students how to communicate through facial expressions. The students sat in groups of four and took turns rolling a dice. Each number on the dice was given an emotion that they had to act out: 1- happiness, 2-sadness, 3- anger, 4-surprise, 5- nervousness, 6- exhaustion. Next, we played *Verb Charades*, which taught the students how to communicate through facial expressions and body language. Each group brainstormed an action verb and wrote it onto an index card that was put into a basket. Student volunteers took turns picking a card out of the basket and acting it out for their class. Finally, we

played *Yes/No*, which taught students how to communicate through facial expressions, body language, and intonation in their voice. Each group brainstormed a conflict that could occur between two people. Students volunteered in pairs to act out the conflict using only the words yes and no, but altering the inflection in their voice in order to persuade their counterpart. After concluding the activities, I asked the students to reflect on what they learned about communication and to share their thoughts with their cooperative groups.



Figure 1.
Monday's performing arts activity, *Roll an Emotion*, used to introduce communication skills

On Tuesday, we focused on collaboration. I defined collaboration for the students as “working together to reach a goal; putting talent expertise, and smarts to work” (Reynolds et al., 2011). We played two improvisational acting games that emphasized collaboration skills. First, we played *Sound Effects*, which stressed collaborating with a partner. Two volunteers came to the front of the classroom. I gave one student an ordinary everyday activity, such as brushing his teeth, to pantomime. The second student, who did not know the given activity, had to watch his partner's movements and make sound effects to accompany the scene. Next, we played *Human*

Machine, which stressed collaborating with a small group. Each group of four students was given two minutes to create a modern day machine, such a dishwasher, using only their bodies and voices. Each group demonstrated their human machine in front of the class. After concluding the activities, I asked the students to reflect on what they learned about collaboration and to share their thoughts with their cooperative groups.



Figure 2.
Tuesday's performing arts activity, *Sound Effects*, used to introduce collaboration skills

On Wednesday, we focused on critical thinking. I defined critical thinking for the students as “looking at problems in a new way, linking learning across subjects and disciplines” (Reynolds et al., 2011). We played two improvisational acting games that emphasized critical thinking skills. First, we played *Mirror Mirror*, which taught students how to problem solve by slowly mirroring the movements of a partner. Then we played *Walk this Way*, which taught students how to take risks and try various solutions. Students begin the activity by walking around the classroom, while being mindful of not touching or bumping into one another. As the

students walked about our classroom space, I called out a character type, an animal, or color. The students had to think critically of how to create a walk, movement, pose, and/or expression that would reflect what I called out. After concluding the activities, I asked the students to reflect on what they learned about critical thinking and to share their thoughts with their cooperative groups.



Figure 3.
Wednesday's performing arts activity, *Mirror Mirror*, used to introduce critical thinking skills

On Thursday, we focused on creativity. I defined creativity for the students as “trying new approaches to get things done; innovation and invention” (Reynolds et al., 2011). We played one improvisational acting game that emphasized creativity skills. The game we played was called *Hats*. This game taught students how to invent a character constructed around one costume piece. I chose groups of four students at a time to pick a hat out of our classroom's costume box. One student would begin a scene by telling the audience what type of party he was hosting. Then I would ring a doorbell and a second student would join him in the acting space

and they would improvise dialogue. I continued to ring the doorbell until the other two characters entered the scene and they all had an opportunity for their hat-inspired characters to interact. After concluding the activity, I asked the students to reflect on what they learned about creativity and to share their thoughts with their cooperative groups.



Figure 4.
Thursday's performing arts activity, *Hats*, used to introduce creativity skills

On Friday, I played a short video by the Partnership for 21st Century Learning and Fablevision titled "Above & Beyond" (Reynolds et al., 2011) that gave a visual portrayal of what the 4C learning skills looked like in real life. After this video, we played one last improvisational drama game called *Hitchhiker*, which allowed students to practice all 4Cs: communication, collaboration, critical thinking and creativity. For this game, four chairs were set up in the front of the classroom to represent a car. One student sat in the driver's seat and a second student walked up to hitchhike. This hitchhiker began a conversation, as any character type of his choice. The driver in the car had to assess what type of character his hitchhiker was portraying

and then he also had to become that type of character. They continued until a new hitchhiker, with a different character portrayal walked up. When the new character got into the car, everyone would switch and assume their character type and so on. We concluded the lesson by discussing what they had learned throughout the week in regards to the 4C skills. They discussed why they thought these skills could help them improve in performing arts, as well as why these skills were important to have for their future in college and in their careers.



Figure 5.
Friday's performing arts activity, *Hitchhiker*, used to review all of the 4C skills

The following week, we began rehearsals for our performing arts production, "American Revolution." During the first week, we learned the lyrics to all of the songs. I played two songs each day for five days until the class learned all ten of the songs in our show. The students were allowed to create dance, or movements to go with each song that they felt would help in communicating the lyrics to our audience. I gave them time to collaborate as a class and decide together on the best choreography for each song.

Over the next three weeks, I worked with the students to learn their lines and block the scenes in our show. We rehearsed for forty-five minutes a day, for four days each week until we had blocked all twelve scenes in the play. While I worked with small groups of students to direct their blocking each day, the other groups were directing to collaborate together to rehearse any previously taught blocking, run their lines, review their dance choreography, and design their own costumes. I took time at the end of each lesson to observe the collaborative groups and take anecdotal records on their progress with the 4C skills.

Once all the songs had been learned and all the scenes were blocked, we spent the next week running the show, so that the students could gain a sense of continuity and improve in their performance skills. During our final week, students brought in costumes that they designed and created so that we could run a few dress rehearsals before our final performance. The students also worked together to create a backdrop and other scenery that would be used to decorate the stage for our performance. We had two performance of our musical production. Parents were invited to each show, as were the 4th and 5th grade classes at our school.

Methods of Data Collection and Analysis

I collected both quantitative and qualitative data for this study. The quantitative data was collected using a rubric that I created to assess my students' 21st Century Learning & Innovation Skills at the beginning and end of the research study. With the rubric, I scored the students' communication, collaboration, critical thinking and creativity skills during their audition week and then again during our final production of "American Revolution." I organized the results from the pre- and post-rubrics into a frequency distribution table. Then I created frequency distribution graphs to give a visual representation of the students' growth over the course of the

research study. In addition to this quantitative data, I also collected qualitative data through observations, anecdotal records, and student journal entries. I analyzed this data in order to find repeated patterns and emerging themes regarding my research question.

FINDINGS AND ANALYSIS

In order to assess the potential growth of my students' ability to use 21st Century Learning & Innovation Skills, I scored each of them on a rubric both before and after our performing arts project. This rubric described the students' communication, collaboration, critical thinking and creativity skills on a scale of 1-4, with 4 being the highest score. The following labels were assigned to each score: 1: Novice, 2: Amateur, 4: Intern, 4: Professional (See Appendix D). In addition to the rubric, I also collected data through observations, anecdotal records, and student journals. The findings from the rubric scores and quantitative data will be presented first, followed by the qualitative data such as the observation notes and journal entries.

Findings from 21st Century Learning & Innovation Skills Rubric

Each of the 21st Learning & Innovation Skills, communication, collaboration, critical thinking, and creativity, will be presented separately. The data will initially be presented for the whole class, and then broken down by gender. It will also be broken down by academic level; in order to compare the GATE (Gifted and Talented Education) identified students to the non-identified students in the class. Pseudonyms have been provided in order to protect the identity of the students who participated in this research project.

Table 1. Communication Skills (Whole Class)			
Student Name	Pre-Assessment	Post-Assessment	Growth
Adam	1: Novice	3: Intern	+2
Allison	1: Novice	2: Amateur	+1
Anna	2: Amateur	3: Intern	+1
Ashley	2: Amateur	4: Professional	+2
Caesar	2: Amateur	3: Intern	+1
Catherine	3: Intern	4: Professional	+1
Claudia	1: Novice	3: Intern	+2
Dale	2: Amateur	4: Professional	+2
Danny	1: Novice	2: Amateur	+1
David	2: Amateur	2: Amateur	0
Donald	2: Amateur	4: Professional	+2
Felix	2: Amateur	4: Professional	+2
Iris	2: Amateur	4: Professional	+2
Jacob	2: Amateur	3: Intern	+1
Jemma	1: Novice	4: Professional	+3
Jerry	2: Amateur	3: Intern	+1
Joanne	2: Amateur	4: Professional	+2
Jonathon	3: Intern	4: Professional	+1
Kenny	2: Amateur	4: Professional	+2
Leticia	3: Intern	4: Professional	+1
Lisa	2: Amateur	2: Amateur	0
Lynn	2: Amateur	3: Intern	+1
Macy	2: Amateur	4: Professional	+2
Manuel	2: Amateur	3: Intern	+1
Marcus	2: Amateur	4: Professional	+2
Mario	2: Amateur	4: Professional	+2
Michael	2: Amateur	4: Professional	+2
Ned	2: Amateur	3: Intern	+1
Peter	3: Intern	4: Professional	+2
Ryan	2: Amateur	4: Professional	+2
Salena	2: Amateur	4: Professional	+2
Sally	1: Novice	4: Professional	+3
Tracy	2: Amateur	3: Intern	+1
Vivian	1: Novice	1: Novice	0

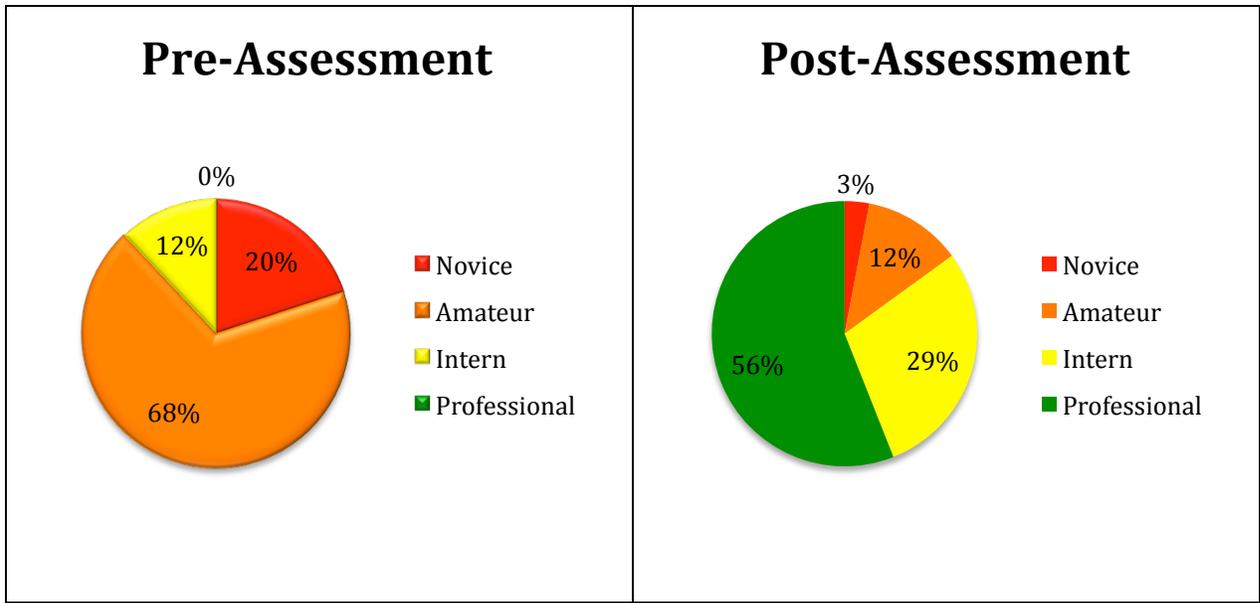


Figure 6.
Communication Skills (Whole Class)

Overall, the findings show that performing arts integration enhanced communication skills in most students. As Figure 6 depicts, 68% of the students in the class had “Level 2: Amateur” communication skills prior to participating in the performing arts activities. This means that when communicating to others, a majority of the students in the class were only clear and audible sometimes, made eye contact with their audience some of the time, and conveyed knowledge of their topic sometimes. By the finale of the class’ musical production, 56% of the students in the class demonstrated “Level 4: Professional” communication skills. This means that when communicating to others, a majority of the students in the class were now able to have every spoken word understood by their audience, make eye contact with intended audience all of the time, and convey knowledge of their topic all of the time.

As Table 1 shows, there were only three students who did not show any growth at all between the pre-assessment and the post-assessment. Thirteen students showed growth by 1 point, sixteen students showed growth by 2 points, and two students showed growth by 3 points.

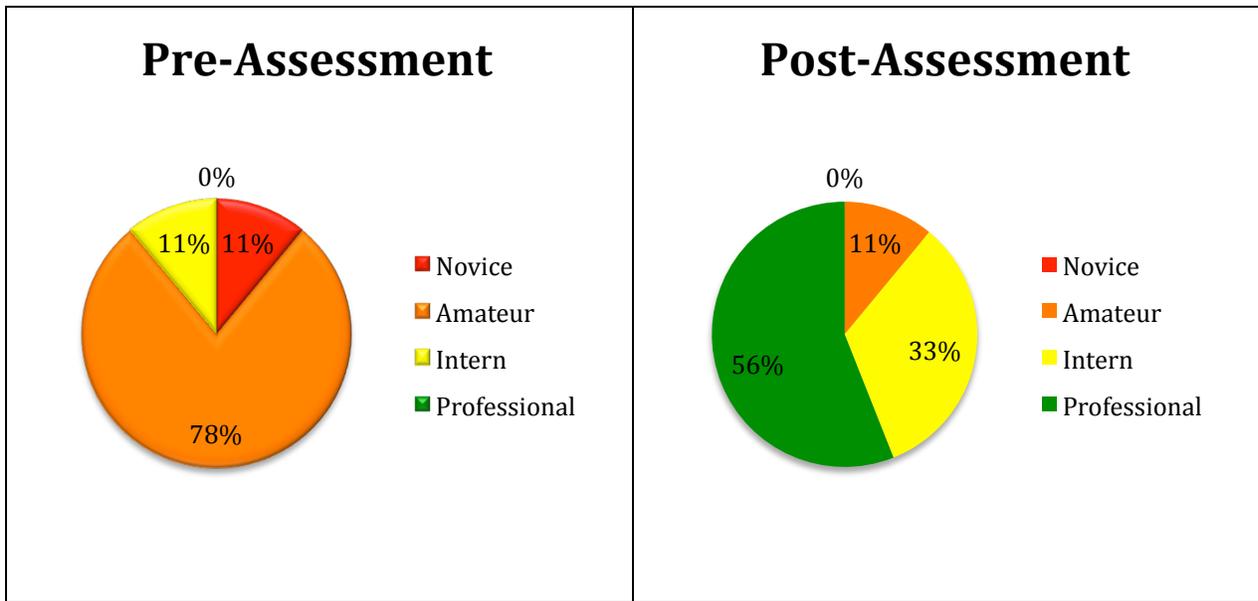


Figure 7.
Communication Skills (Male Students)

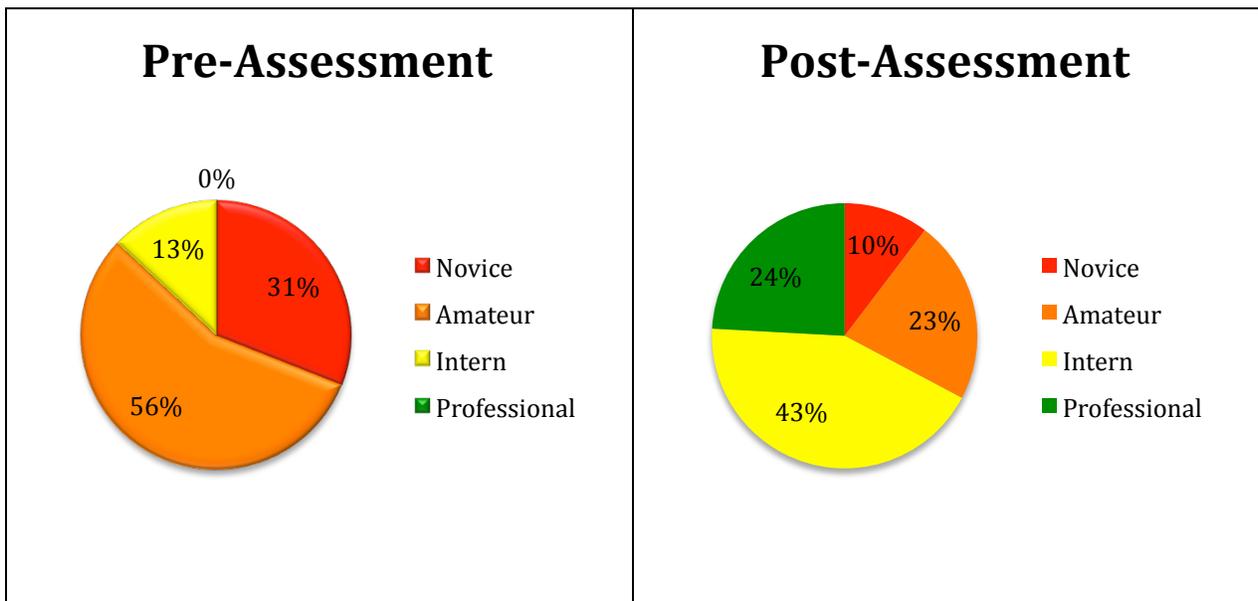


Figure 8.
Communication Skills (Female Students)

When analyzing the data by gender, male students showed a greater improvement in their communication skills than the female students.

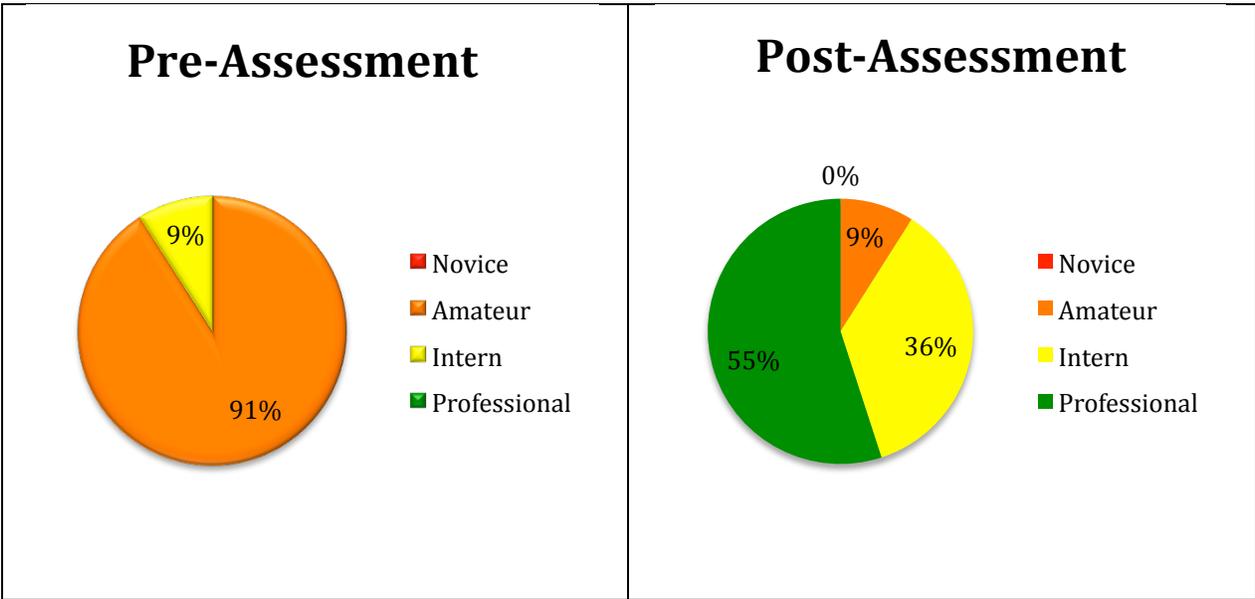


Figure 9.
Communication Skills (GATE-identified Male Students)

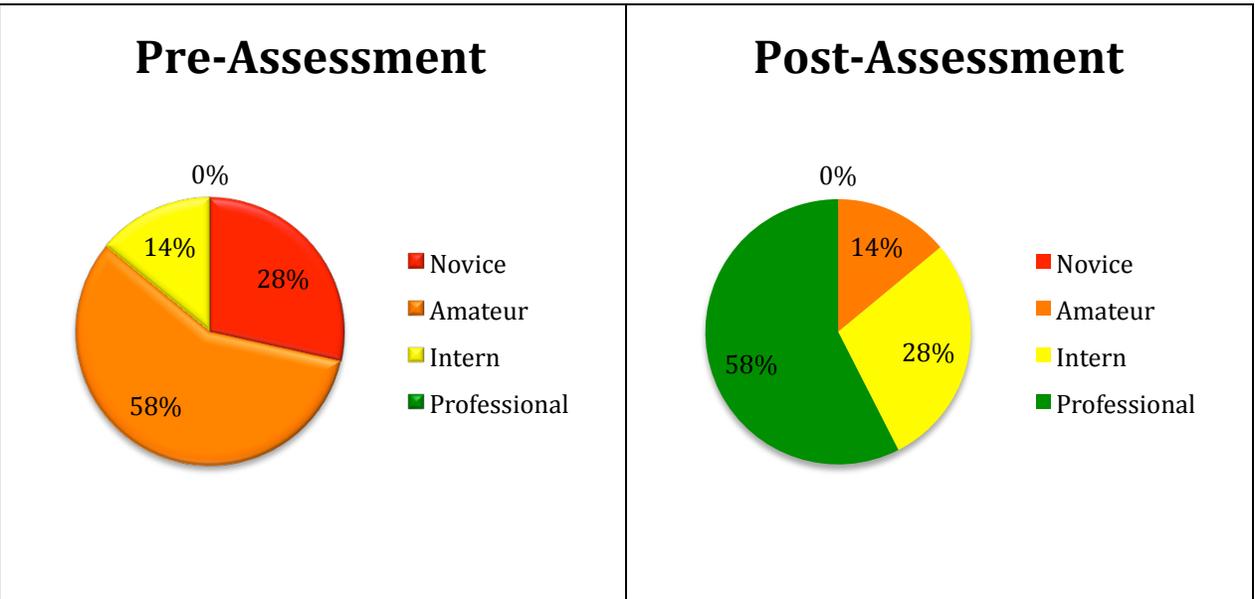


Figure 10.
Communication Skills (Non GATE-identified Male Students)

When comparing the data between GATE-identified and non GATE-identified male students, the non GATE-identified male students showed more overall growth in their communication skills.

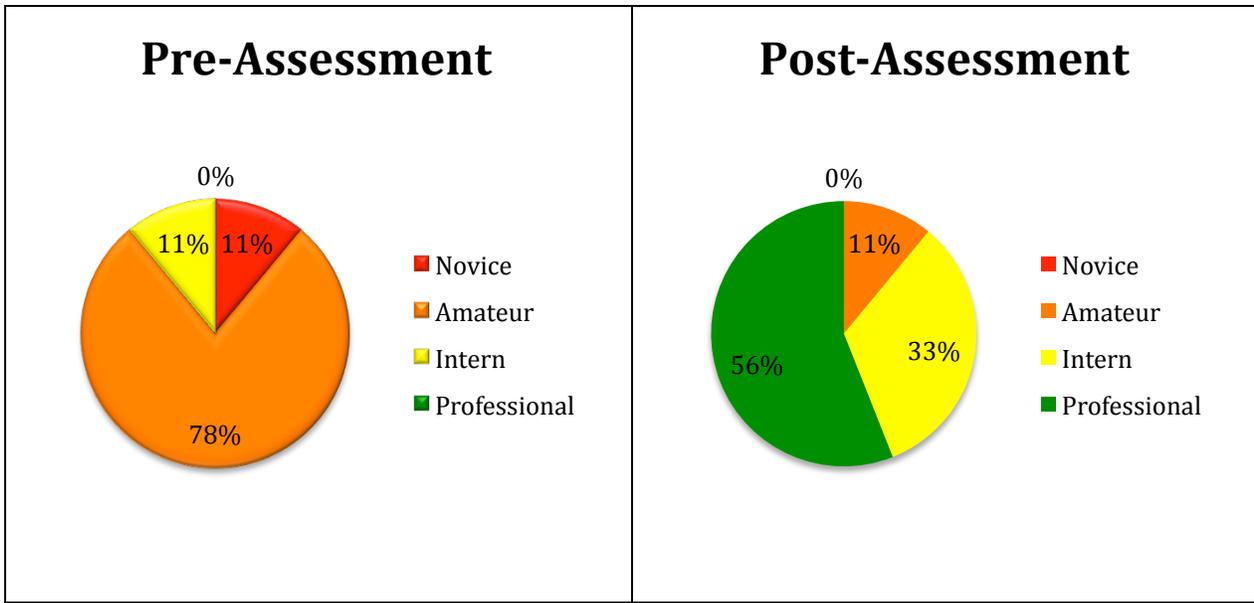


Figure 11.
Communication Skills (GATE-identified Female Students)

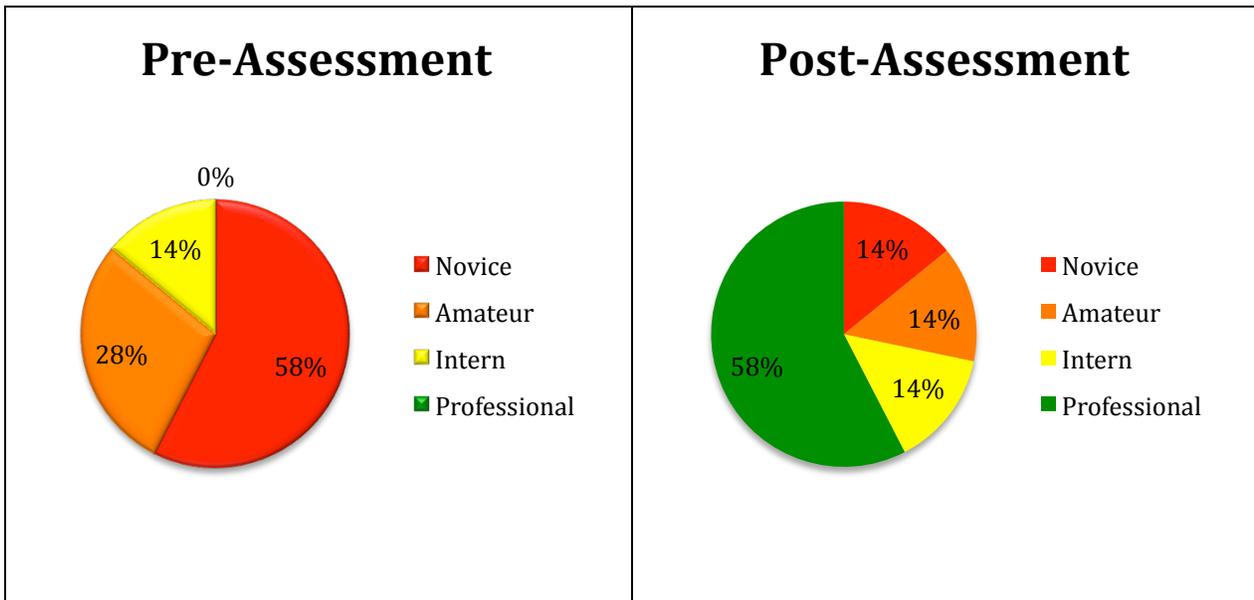


Figure 12.
Communication Skills (Non GATE-identified Female Students)

When comparing the data between GATE-identified and non GATE-identified female students, the non GATE-identified female students showed more overall growth in their communication skills.

Table 2. Collaboration Skills (Whole Class)			
Name	Pre-Assessment	Post-Assessment	Growth
Adam	1: Novice	2: Amateur	+1
Allison	2: Amateur	2: Amateur	0
Anna	2: Amateur	4: Professional	+2
Ashley	2: Amateur	4: Professional	+2
Caesar	2: Amateur	2: Amateur	0
Catherine	3: Intern	4: Professional	+1
Claudia	2: Amateur	3: Intern	+1
Dale	3: Intern	4: Professional	+1
Danny	1: Novice	2: Amateur	+1
David	2: Amateur	3: Intern	+1
Donald	1: Novice	3: Intern	+1
Felix	2: Amateur	3: Intern	+1
Iris	3: Intern	4: Professional	+1
Jacob	2: Amateur	3: Intern	+1
Jemma	2: Amateur	4: Professional	+2
Jerry	3: Intern	4: Professional	+1
Joanne	3: Intern	4: Professional	+1
Jonathon	2: Amateur	3: Intern	+1
Kenny	2: Amateur	3: Intern	+1
Leticia	3: Intern	4: Professional	+1
Lisa	2: Amateur	3: Intern	+1
Lynn	2: Amateur	3: Intern	+1
Macy	2: Amateur	4: Professional	+2
Manuel	2: Amateur	4: Professional	+2
Marcus	2: Amateur	4: Professional	+2
Mario	3: Intern	4: Professional	+1
Michael	1: Novice	3: Intern	+2
Ned	1: Novice	3: Intern	+2
Peter	3: Intern	4: Professional	+1
Ryan	1: Novice	2: Amateur	+1
Salena	2: Amateur	4: Professional	+2
Sally	2: Amateur	4: Professional	+2
Tracy	3: Intern	4: Professional	+1
Vivian	2: Amateur	3: Intern	+1

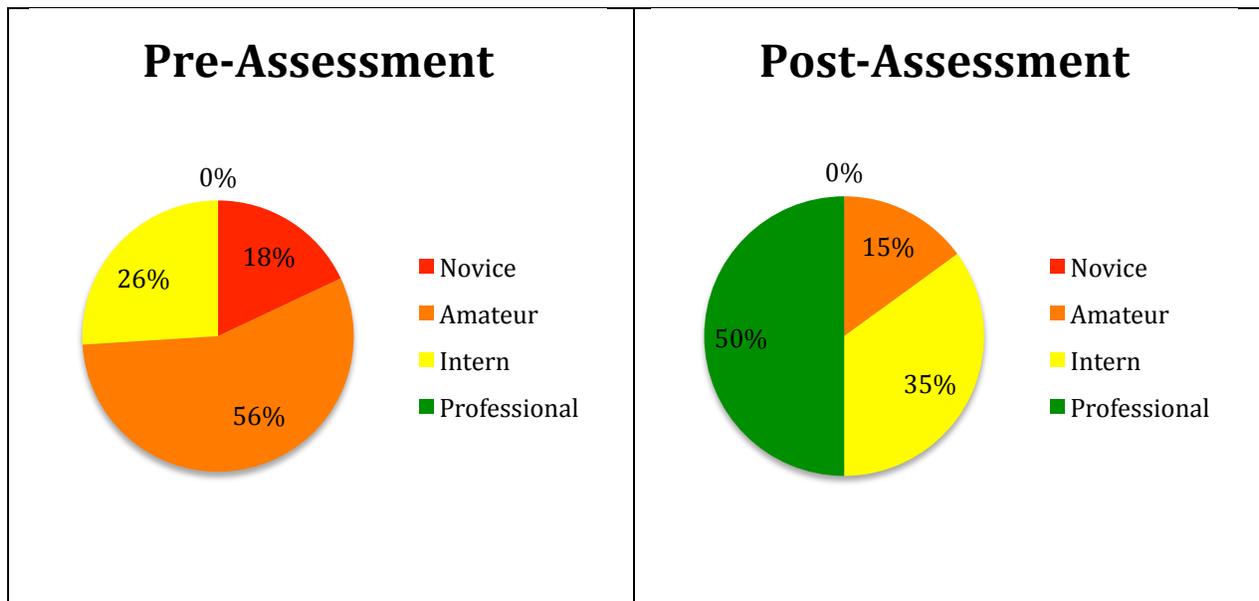


Figure 13.
Collaboration Skills (Whole Class)

Overall, the findings show that performing arts integration enhanced collaboration skills in most students. As Figure 13 depicts, 56% of the students in the class had “Level 2: Amateur” collaboration skills prior to participating in the performing arts activities. This means that when collaborating with others, a majority of the students in the class were contributing their skills, knowledge and opinions some of the time, valuing the skills, knowledge and opinions of their group some of the time, and repeatedly needing reminders to do their assigned work. By the finale of the class’ musical production, 50% of the students in the class demonstrated “Level 4: Professional” collaboration skills. This means that when collaborating with others, half of the students in the class were now able to actively contribute their skills, knowledge and opinions, consistently value the skills, knowledge and opinions of their group, and always finish their assigned work without reminders.

As Table 2 shows, there were only two students who did not show any growth at all between the pre-assessment and the post-assessment. Twenty-two students showed growth by 1 point, and ten students showed growth by 2 points.

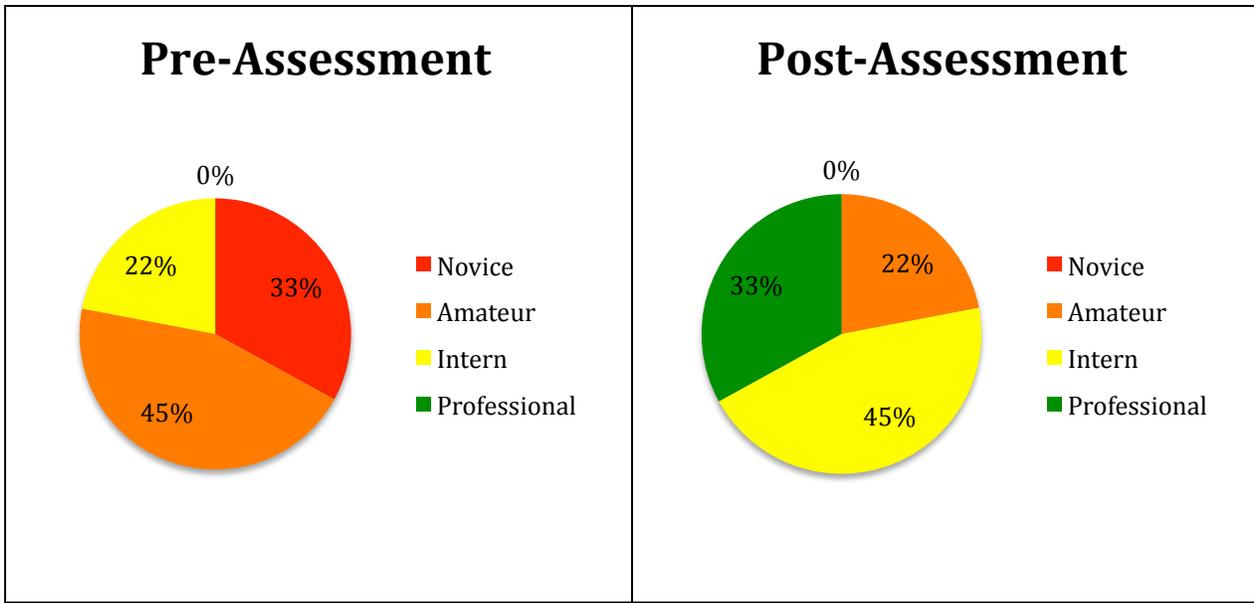


Figure 14.
Collaboration Skills (Male Students)

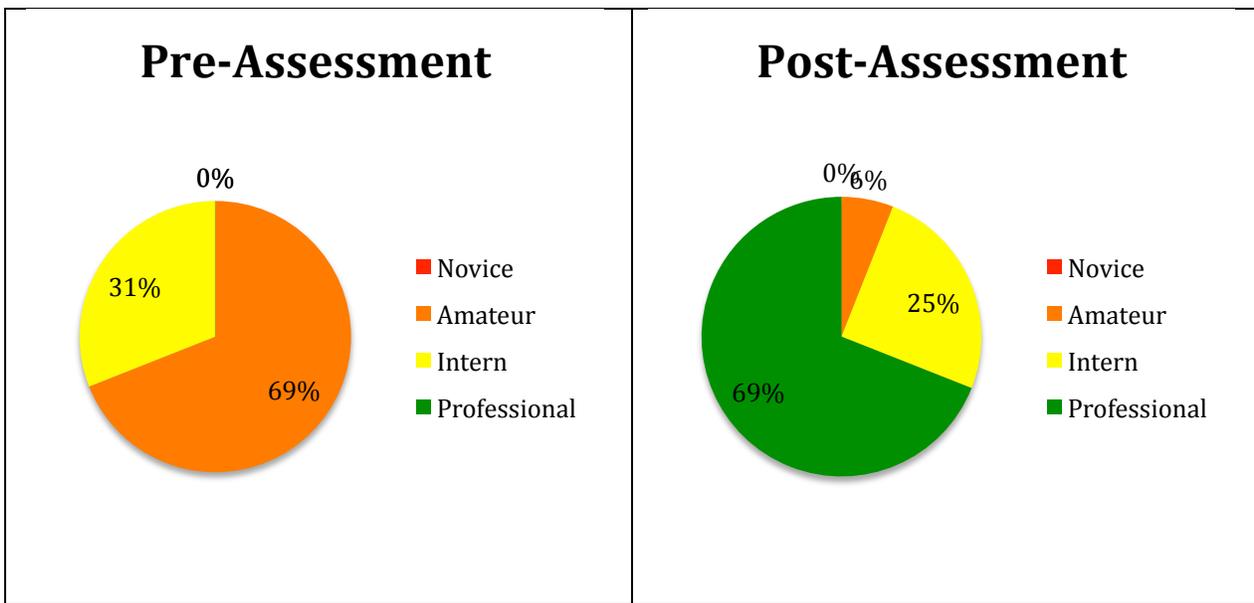


Figure 15.
Collaboration Skills (Female Students)

When analyzing the data by gender, female students showed a greater improvement in their collaboration skills than the male students.

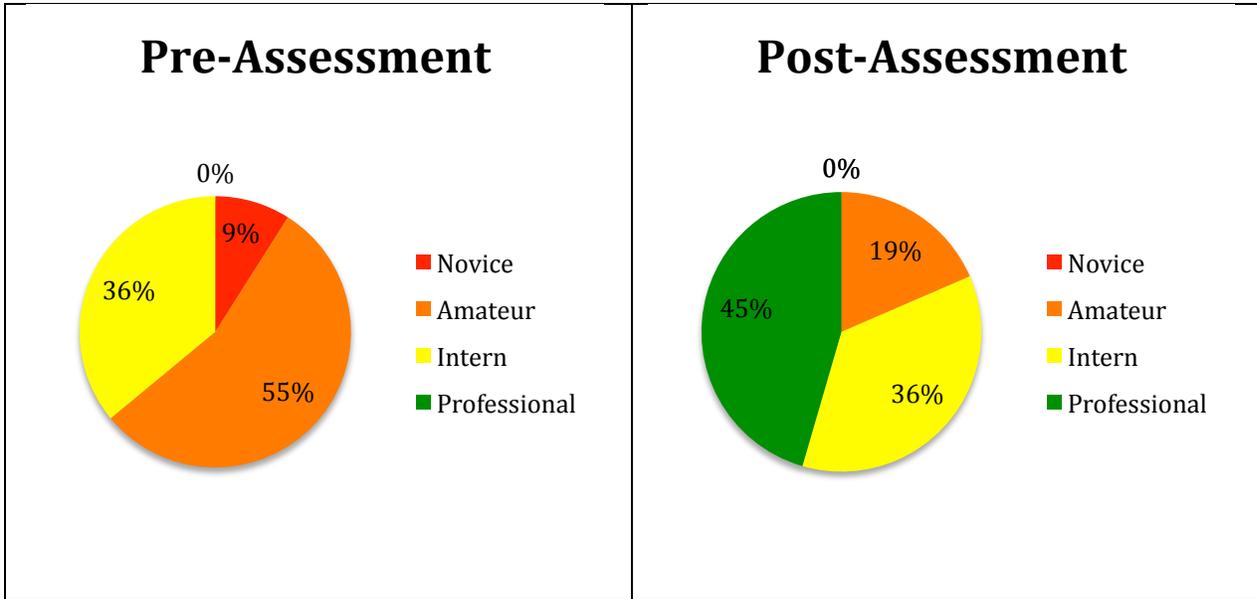


Figure 16.
Collaboration Skills (GATE-identified Male Students)

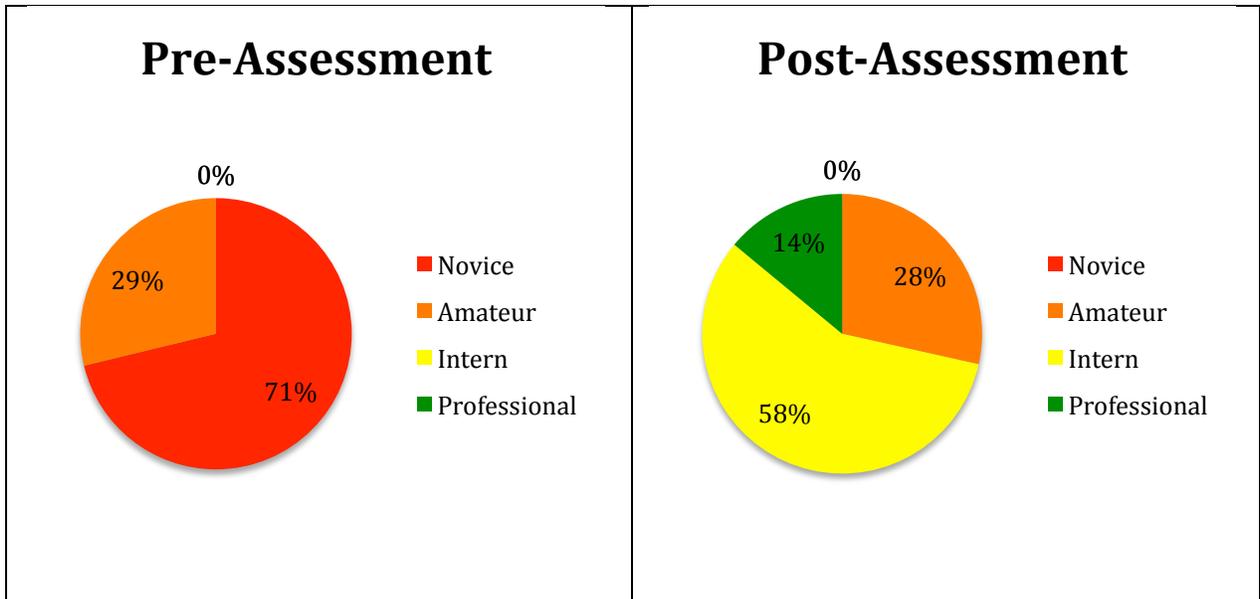


Figure 17.
Collaboration Skills (Non GATE-identified Male Students)

When comparing the data between GATE-identified and non GATE-identified male students, the GATE-identified male students showed more overall growth in their collaboration skills.

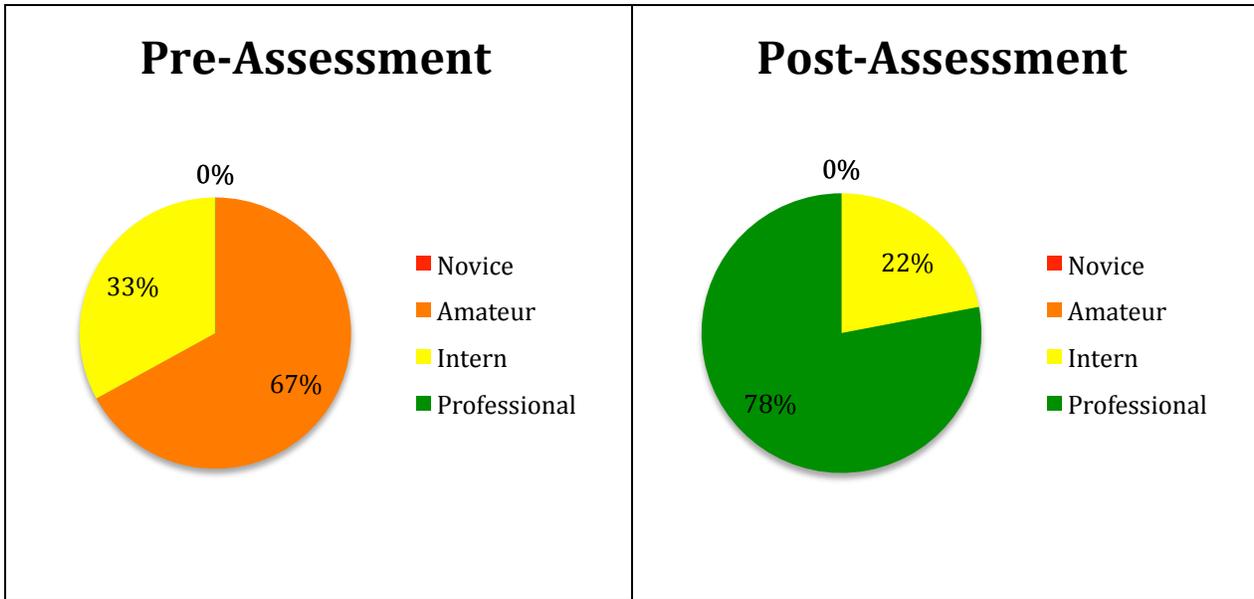


Figure 18.
Collaboration Skills (GATE-identified Female Students)

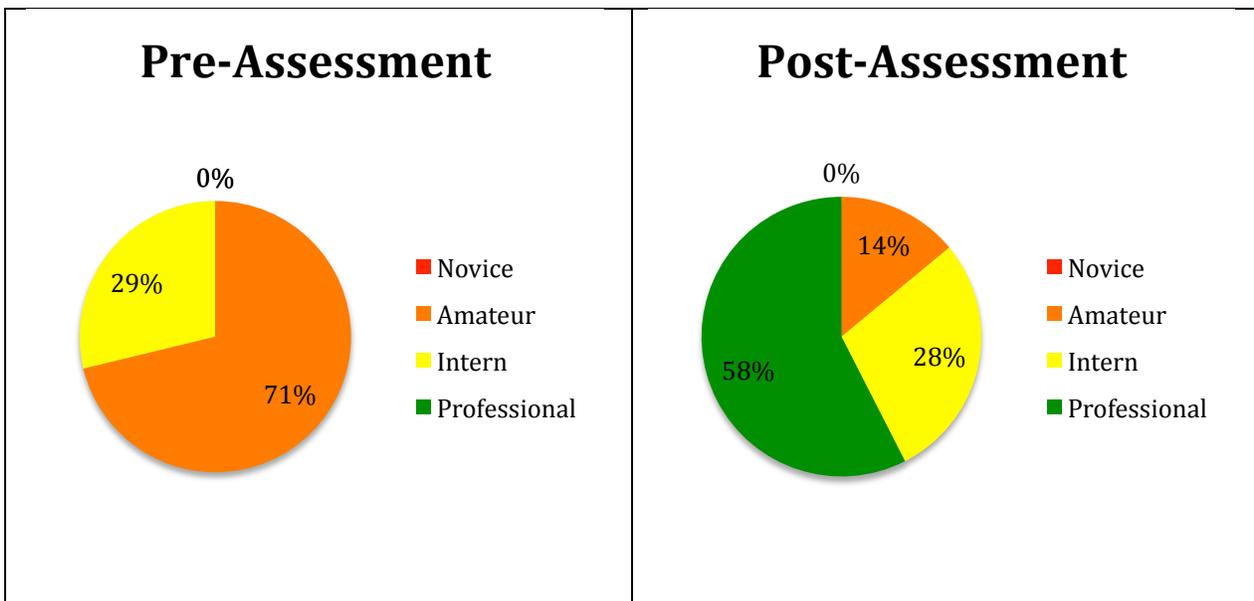


Figure 19.
Collaboration Skills (Non GATE-identified Female Students)

When comparing the data between GATE-identified and non GATE-identified female students, the GATE-identified female students showed more overall growth in their collaboration skills.

Table 3.
Critical Thinking Skills (Whole Class)

Name	Pre-Assessment	Post-Assessment	Growth
Adam	2: Amateur	2: Amateur	0
Allison	1: Novice	2: Amateur	+1
Anna	2: Amateur	3: Intern	+1
Ashley	1: Novice	3: Intern	+2
Caesar	1: Novice	2: Amateur	+1
Catherine	2: Amateur	4: Professional	+2
Claudia	2: Amateur	2: Amateur	0
Dale	2: Amateur	4: Professional	+2
Danny	2: Amateur	2: Amateur	0
David	2: Amateur	3: Intern	+1
Donald	2: Amateur	4: Professional	+2
Felix	2: Amateur	4: Professional	+2
Iris	1: Novice	3: Intern	+2
Jacob	2: Amateur	3: Intern	+1
Jemma	3: Intern	4: Professional	+1
Jerry	3: Intern	3: Intern	0
Joanne	3: Intern	4: Professional	+1
Jonathon	2: Amateur	4: Professional	+2
Kenny	3: Intern	3: Intern	0
Leticia	2: Amateur	4: Professional	+2
Lisa	2: Amateur	3: Intern	+1
Lynn	2: Amateur	3: Intern	+1
Macy	1: Amateur	3: Intern	+2
Manuel	2: Amateur	3: Intern	+1
Marcus	2: Novice	4: Professional	+2
Mario	3: Intern	4: Professional	+1
Michael	1: Novice	3: Intern	+2
Ned	1: Novice	2: Amateur	+1
Peter	3: Intern	4: Professional	+1
Ryan	1: Novice	4: Professional	+3
Salena	3: Intern	4: Professional	+1
Sally	1: Novice	3: Intern	+2
Tracy	3: Intern	4: Professional	+1
Vivian	1: Novice	1: Novice	0

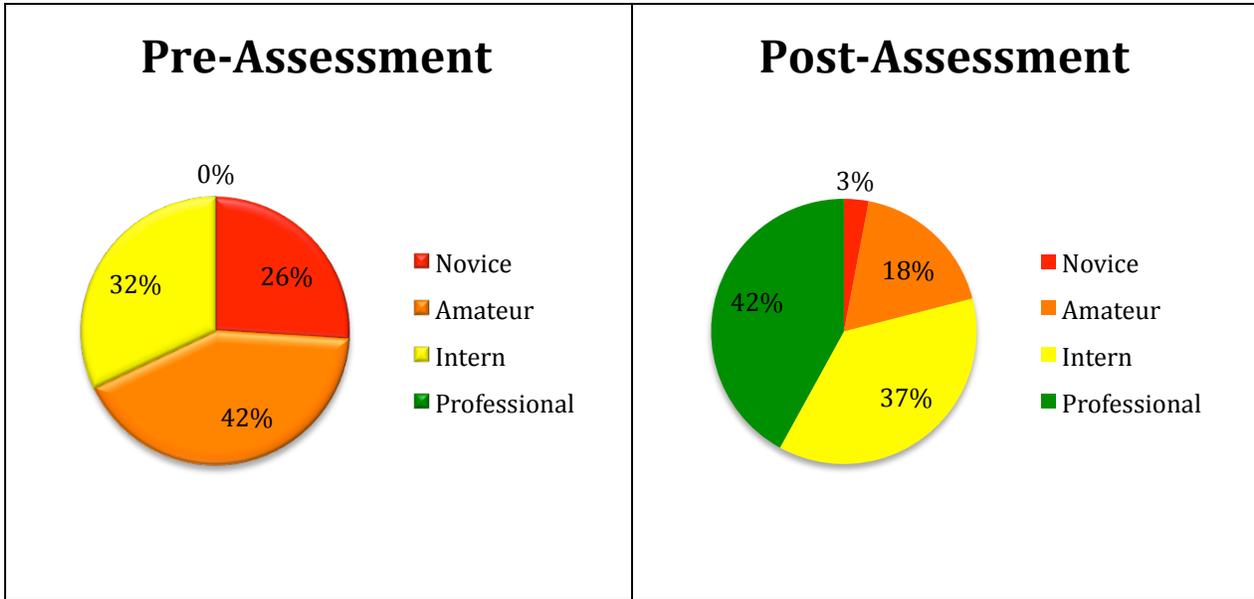


Figure 20.
Critical Thinking Skills (Whole Class)

Overall, the findings show that performing arts integration enhanced critical thinking skills in most students. As Figure 20 depicts, 42% of the students in the class had “Level 2: Amateur” critical thinking skills prior to participating in the performing arts activities. This means that when asked to think critically, a majority of the students in the class were coming to conclusions without getting clarification, recognizing cause/effect without seeing their relationship, and having an opinion without supporting it. By the finale of the class’ musical production, 42% of the students in the class demonstrated “Level 4: Professional” critical thinking skills. This means that when asked to think critically, a majority of the students in the class were now able to draw conclusions based on sound information, analyze cause/effect in order to make improvements, and have a strong opinion that could be justified with specific examples.

As Table 3 shows, there were only six students who did not show any growth at all between the pre-assessment and the post-assessment. Fifteen students showed growth by 1 point, twelve students showed growth by 2 points, and one student showed growth by 3 points.

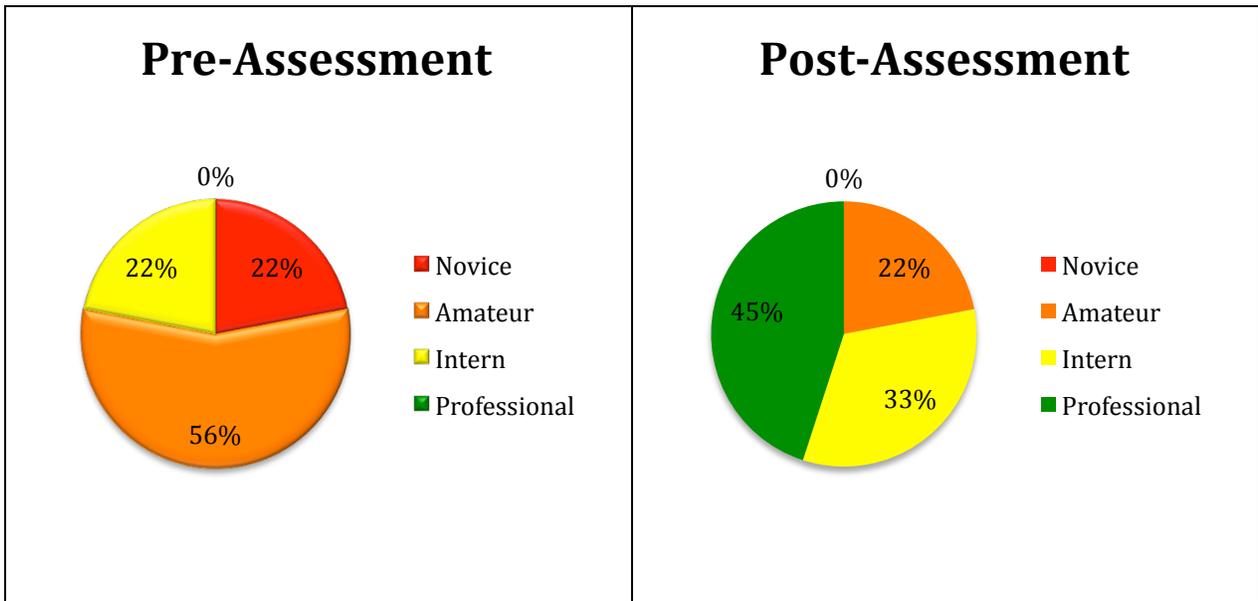


Figure 21.
Critical Thinking Skills (Male Students)

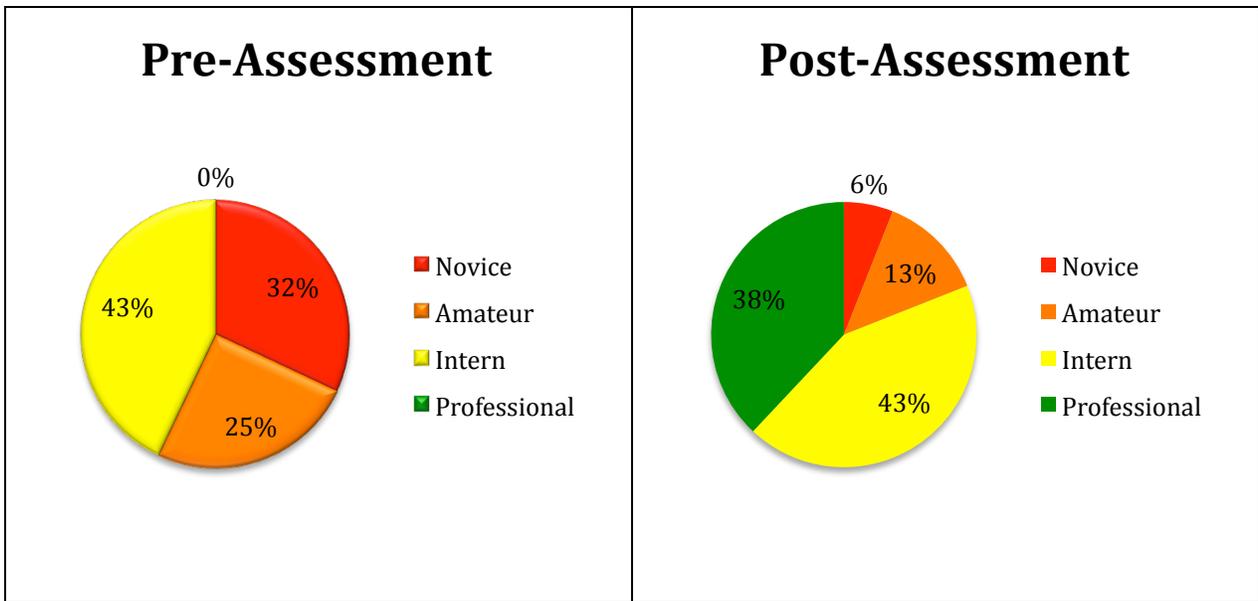


Figure 22.
Critical Thinking Skills (Female Students)

When analyzing the data by gender, male students showed a greater improvement in their critical thinking skills than the female students.

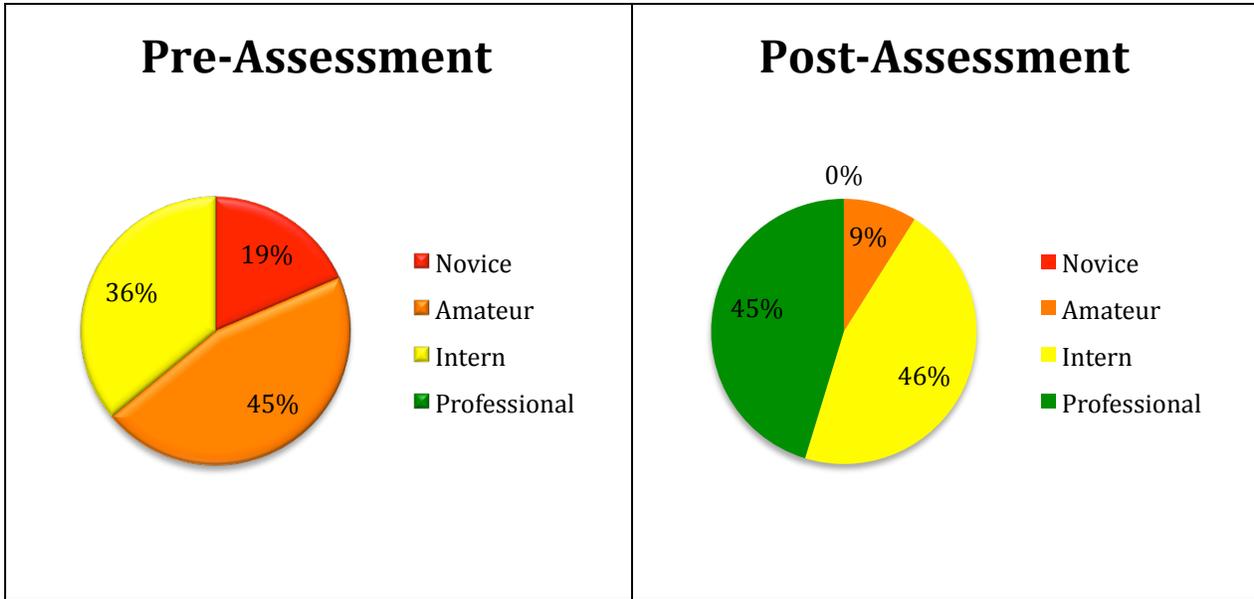


Figure 23.
Critical Thinking Skills (GATE-identified Male Students)

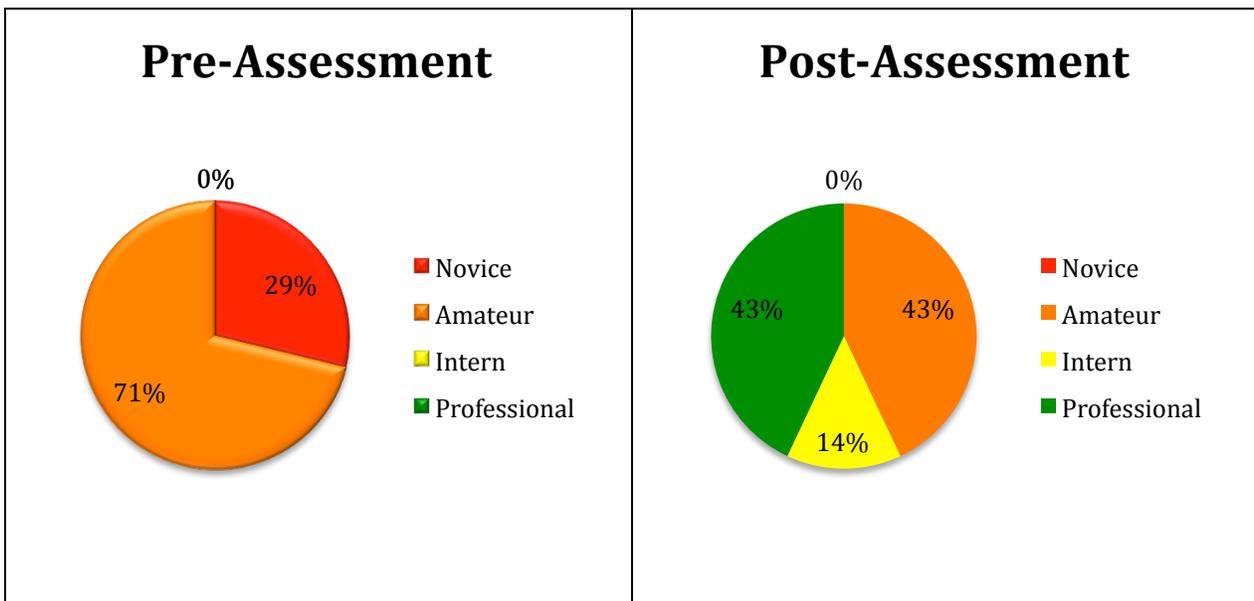


Figure 24.
Critical Thinking Skills (Non GATE-identified Male Students)

When comparing the data between GATE-identified and non GATE-identified male students, the GATE-identified male students showed more overall growth in their critical thinking skills.

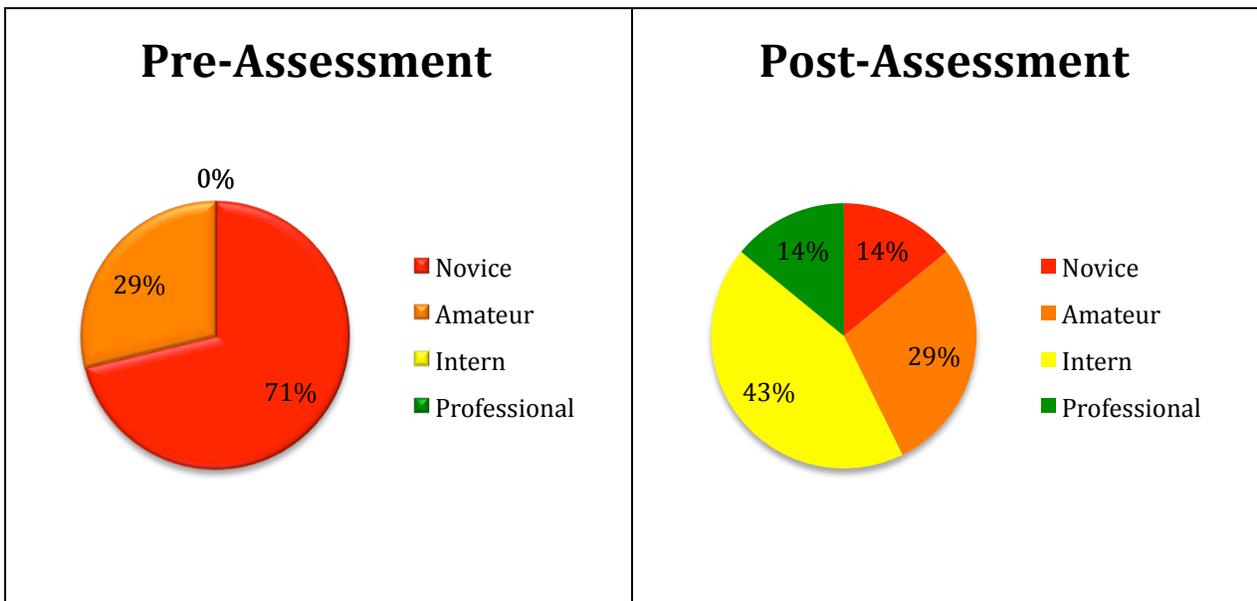


Figure 26.
Critical Thinking Skills (Non GATE-identified Female Students)

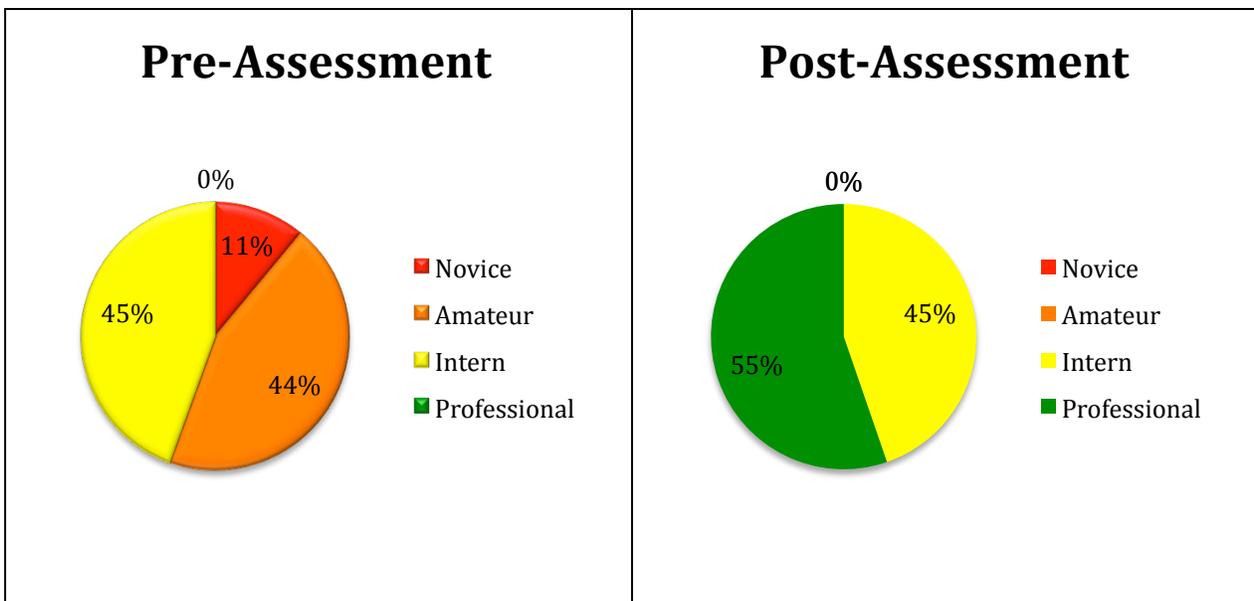


Figure 25.
Critical Thinking Skills (GATE-identified Female Students)

When comparing the data between GATE-identified and non GATE-identified female students, the GATE-identified female students showed more overall growth in their critical thinking skills.

Table 4. Creativity Skills (Whole Class)			
Name	Pre-Assessment	Post-Assessment	Growth
Adam	2: Amateur	3: Intern	+1
Allison	3: Intern	4: Professional	+1
Anna	2: Amateur	3: Intern	+1
Ashley	2: Amateur	4: Professional	+2
Caesar	1: Novice	2: Amateur	+1
Catherine	3: Intern	4: Professional	+1
Claudia	3: Intern	4: Professional	+1
Dale	3: Intern	4: Professional	+1
Danny	1: Novice	2: Amateur	+1
David	2: Amateur	3: Intern	+1
Donald	1: Amateur	2: Amateur	+1
Felix	2: Amateur	3: Intern	+1
Iris	3: Intern	4: Professional	+1
Jacob	2: Amateur	4: Professional	+2
Jemma	3: Intern	4: Professional	+1
Jerry	2: Amateur	3: Intern	+1
Joanne	3: Intern	4: Professional	+1
Jonathon	2: Amateur	4: Professional	+2
Kenny	2: Amateur	3: Intern	+1
Leticia	3: Intern	4: Professional	+1
Lisa	3: Intern	4: Professional	+1
Lynn	3: Intern	4: Professional	+1
Macy	3: Intern	4: Professional	+1
Manuel	3: Intern	4: Professional	+1
Marcus	2: Amateur	4: Professional	+2
Mario	2: Amateur	4: Professional	+2
Michael	2: Amateur	4: Professional	+2
Ned	2: Amateur	3: Intern	+1
Peter	3: Intern	4: Professional	+1
Ryan	2: Amateur	4: Professional	+2
Salena	3: Intern	4: Professional	+1
Sally	3: Intern	4: Professional	+1
Tracy	3: Intern	4: Professional	+1
Vivian	2: Amateur	3: Intern	+1

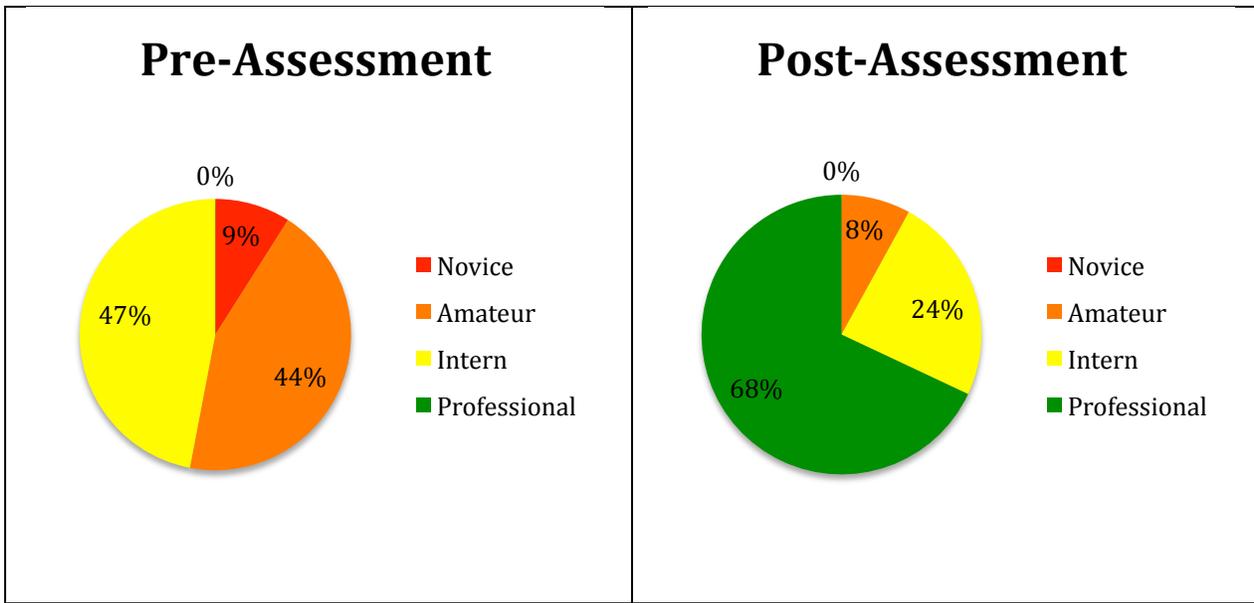


Figure 27.
Creativity Skills (Whole Class)

Overall, the findings show that performing arts integration enhanced creativity skills in all students. As Figure 27 depicts, 44% of the students in the class had “Level 2: Amateur” creativity skills prior to participating in the performing arts activities. This means that when working on a project, a majority of the students in the class only demonstrated evidence of original thinking some of the time, showed little evidence of personalization in their final product, and rarely worked to be resourceful. By the finale of the class’ musical production, 68% of the students in the class demonstrated “Level 4: Professional” creativity skills. This means that when working on a project, a majority of the students in the class were now able to demonstrate evidence of original thinking all of the time, show extraordinary personalization in their final products, and actively work to be resourceful.

As Table 4 shows, there were zero students who did not show any growth at all between the pre-assessment and the post-assessment. Twenty-seven students showed growth by 1 point, and seven students showed growth by 2 points.

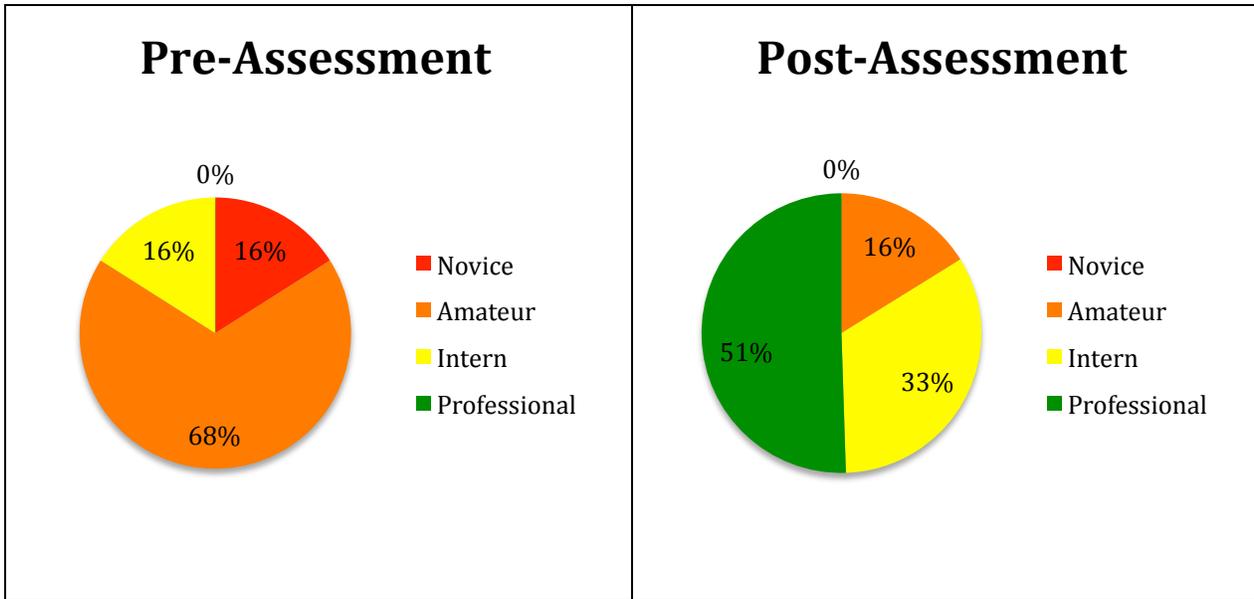


Figure 28.
Creativity Skills (Male Students)

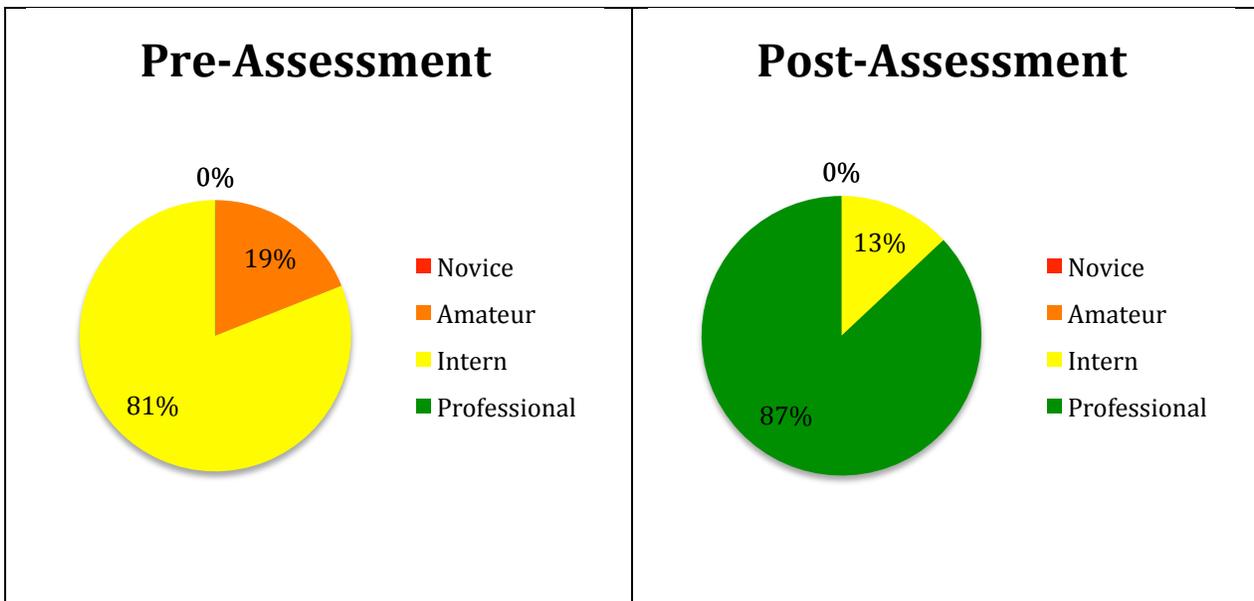


Figure 29.
Creativity Skills (Female Students)

When analyzing the data by gender, female students showed a greater improvement in their creativity skills than the male students.

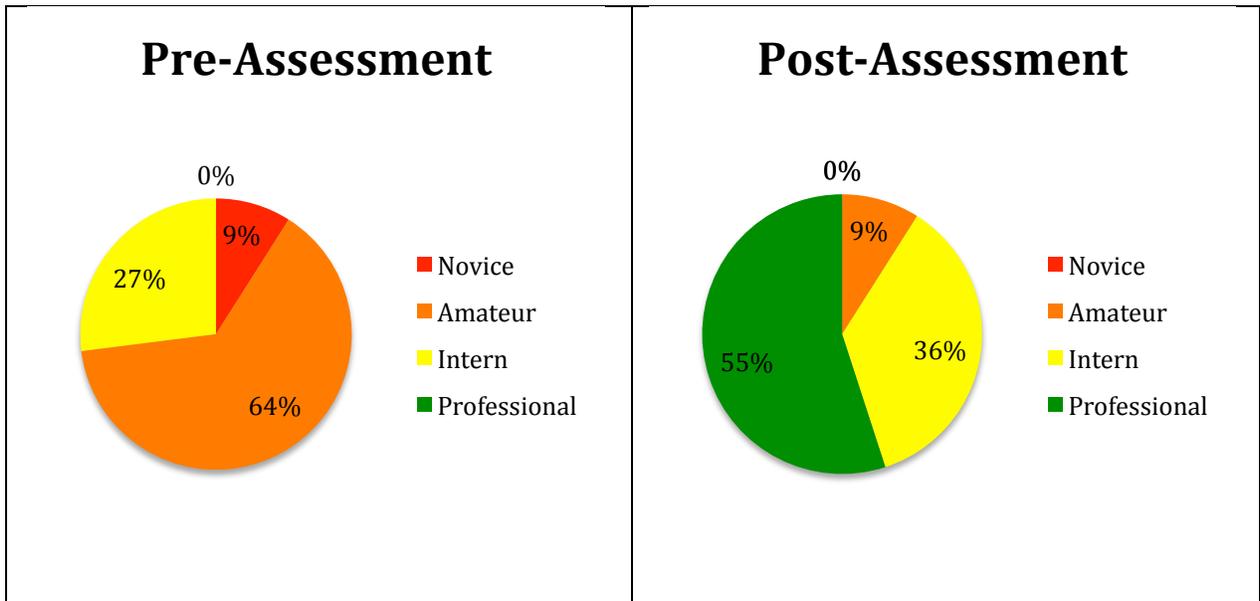


Figure 30.
Creativity Skills (GATE-identified Male Students)

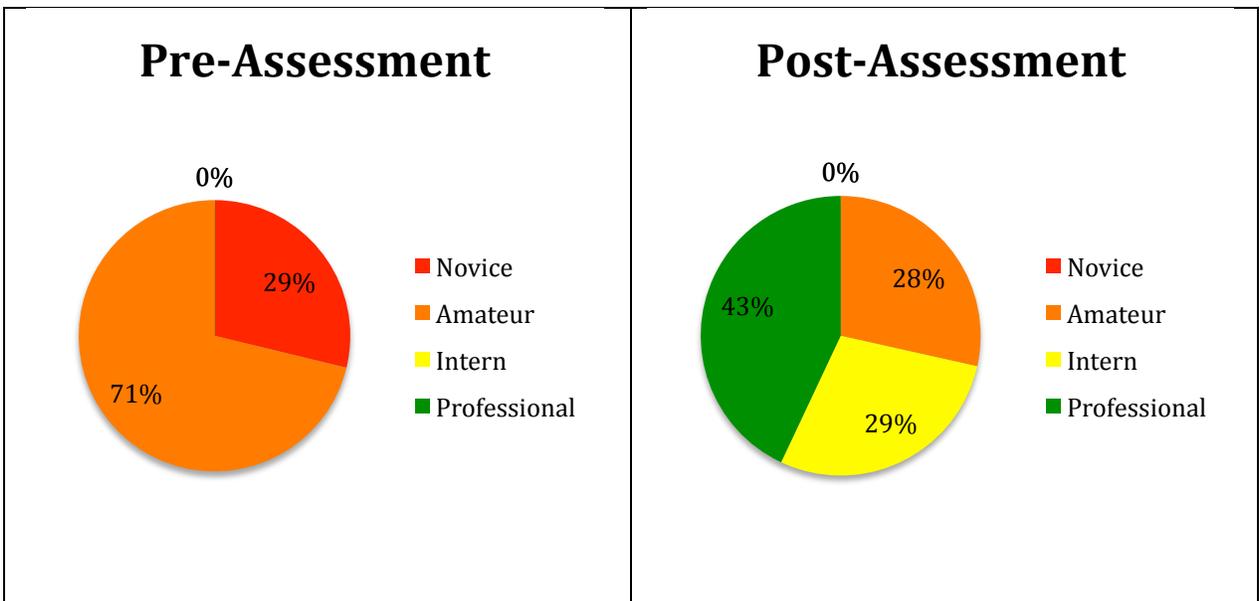


Figure 31.
Creativity Skills (Non GATE-identified Male Students)

When comparing the data between GATE-identified and non GATE-identified male students, the GATE-identified male students showed more overall growth in their creativity skills.

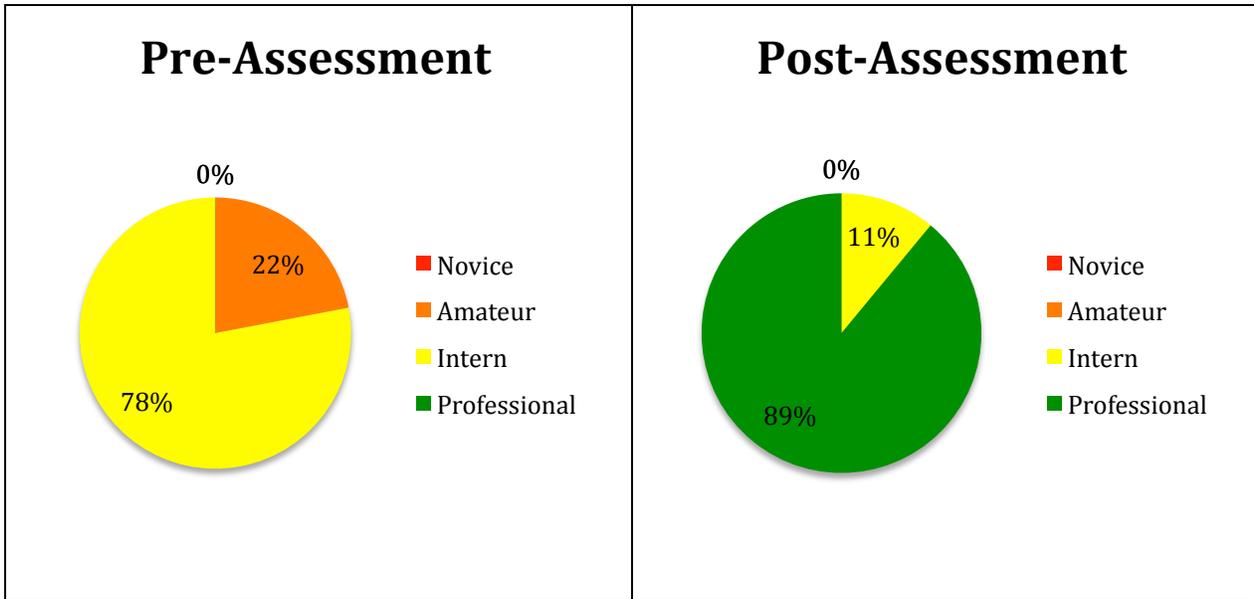


Figure 32.
Creativity Skills (GATE-identified Female Students)

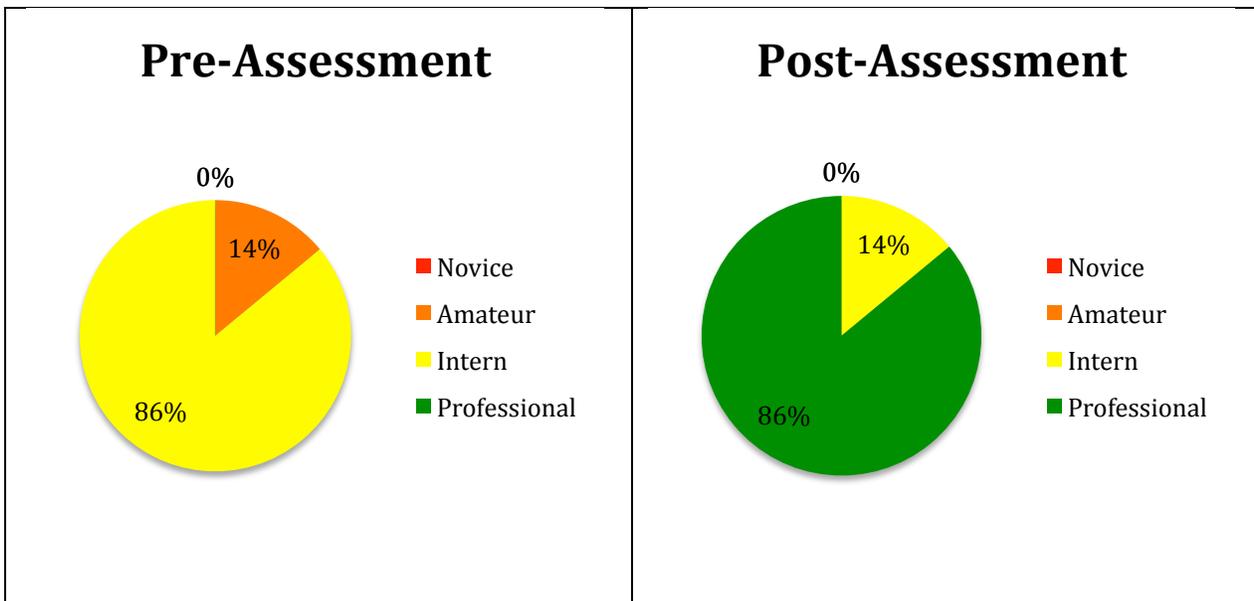


Figure 33.
Creativity Skills (Non GATE-identified Female Students)

When comparing the data between GATE-identified and non GATE-identified female students, the GATE-identified male students showed more overall growth in their creativity skills.

Findings from Teacher Observations and Anecdotal Records

During the course of this six-week project, I observed the students during our daily performing arts activities in order to examine their use of communication, collaboration, critical thinking and creativity skills.

Communication

Several trends emerged as I observed the class' communication skills. One trend that I found in my notes was that my students continued to improve in saying their lines in a way that communicated the storyline better to the audience. Even though the script that we were using for our show was written for children, there was still a lot of rich academic language that outlined the history of the Revolutionary War. My students studied the scripts during class and at home in order to better understand the meaning of their dialogue. In rehearsals, they played with how they delivered their lines in order to find ways that they could draw emphasis to certain key words or phrases from history. By the time we preformed our show for parents, teachers, and the other 5th grade classes at our school, my students were adept at articulating and enunciating every word so that the audience could understand what their characters had to say about this important time in history.

Another trend was that students were learning how to use their facial expressions and body language as a communication tool. For example, when a student wanted to show that their character was frustrated, he would roll his eyes and throw his hands in the air. When I complimented one student for his improvements during rehearsal, he replied, "I used to think that communication was just like talking and having a conversation with someone, but now I see how it's other things too like the faces you make and the way you move your body." Although using

face and body language was not part of 21st Century Learning & Innovation Skills Rubric, I thought that it was important to draw attention to because it was a key trend in my anecdotal records that I wrote while observing my students.



Figure 34.
Communication between Benjamin Franklin and Thomas Jefferson

Collaboration

Two important trends emerged as I observed the class' collaboration skills. The first was that my students improved in their willingness to offer ideas to their group, while at the same time still valuing the opinions that their peers contributed. After casting the show, I rearranged the seating chart in my class so that students would be sitting in groups with the others from their scene in the play. During the early stages of the rehearsal process, I asked them to work together with their groups to choreograph the song from their scene. For choreography, the students had to decide simple hand movements that would be entertaining, as well as aid the audience in understanding the lyrics. The students became so eager to collaborate on choreography that they

even began to volunteer to stay inside the classroom at recess and lunch to brainstorm ideas and try them out.

The other trend I noticed in regards to collaboration was that my students were improving in their ability to fulfill their assigned tasks without me reminding them. One of the most important assigned tasks that the students had was to memorize their lines for the show. I provided a deadline for the class to have their lines memorized two weeks before the final performance date. As with the choreography, the students found time to work together on memorizing their lines outside of our scheduled rehearsals. I could see that as the deadline grew nearer, the students understood that the rest of the class depended on them to be equally dedicated to the task of memorizing their lines. When I asked one of my students why she wanted to work on running her lines with her group in her free time, she remarked, “We all need to put in our best effort to complete our goal. If one of us doesn’t know our lines on stage, then it will mess up everybody else who has been working so hard.”



Figure 35.
Collaboration during an impromptu lunchtime choreography session

Critical Thinking

One important trend emerged as I observed the class' critical thinking skills. I saw that my students were learning to become problem-solvers in real life situations. During the week before our performance, one student even told me, "I used to think problem-solving was just something that we did in math, but now I see that we can solve problems everywhere, like with how we put together our own costumes and designed these sets." For their costumes, I gave my class the opportunity to research their character in the computer lab and design their own costume. I provided them with a costume design worksheet, which they downloaded from my class website (See Appendix E). The students used their problem-solving skills to determine how they could put together their costume using items that they had at home. For example, one student figured out that he could use his old baseball pants since they resembled the breeches worn by men in the colonial period.

For the set design, the students originally had grandiose ideas about constructing the ship from the Boston Tea Party and a forest for the minutemen to hide in. As we looked closer at the script, they realized that each scene was only 3-4 minutes in length and that it would not be reasonable to have a set change for the ten different scenes in the show. One of the students suggested that we have just one backdrop of an open history book, so that the characters in the show could seemingly step out of the pages of history to tell their story. Another student built upon her idea and suggested that we make a timeline over the stage for the ten scenes from history, which were in our production.



Figure 36.
Set design as a result of critical thinking

Creativity

There was one notable trend that emerged as I observed the class' creativity skills. Over the course of our rehearsal process, my students were demonstrating that they could generate interesting, original ideas. As the director of the show, I made an effort to open to my students' suggestions about their blocking, costumes, and props. For example, in Scene 5 when Paul Revere prepares to warn the colonists that the redcoats are coming, my student who played Revere thought it would be entertaining to act as if he just woke up and was sleep walking through his first few lines. He even experimented with falling on stage and it worked well with his lines, so we decided to keep it as part of the blocking. When I asked him how he came up with that idea he answered, "Well, I guess I've learned that if you can imagine something in your head, then you can usually do it on stage too!"

This sleepy scene opener inspired the other students from Paul Revere's scene. They asked me if their characters could wear pajamas for their costumes. These students knew that

Paul Revere did not actually wake up in the middle of the night to warn the British, and that his children did not actually wear Sponge Bob Squarepants pajamas. However, their suggestion to wear pajamas showed me that they were thinking outside of the box and that they understood that their scene had an aspect of comic relief.



Figure 37.
Creativity in the Revere family’s costume design

Findings from Student Journal Entries

The day after our performance of “American Revolution,” I asked my students to reflect on their experiences over the past six weeks, throughout the entire performing arts project, and to write about it in their journals. What I found was that nearly all of my students felt that their work on the play helped them to be better at collaborating and being creative. One student wrote, “It was cool how we all had to work on our own lines and songs for the play and in the end everyone got the job done. I learned that if we all work together, we can accomplish

something amazing.” Another student wrote, “I never thought I would be able to think of ideas for props. I thought only teachers came up with those ideas. But I actually had some good ideas that we used.”

There were not many students who referenced the use of communication or critical thinking skills in their journal entries. However, two of my GATE-identified male students made noteworthy remarks. In regards to his communication skills, one student wrote, “During practice, my partner and I shared techniques, ideas and thoughts about how we could better express our characters’ emotions. We also always reminded each other to project our voices so the audience could hear us.” The other student wrote, “One time in dress rehearsal I messed up a line, but I stayed in character, said a related line, and then we got back on track. I learned that when I was on stage could think around a problem and come up with a plan to help me when my lines didn’t come to mind.”

Overall Findings Across All Data

After analyzing the quantitative data from the pre- and post-assessments in conjunction with the qualitative data from my personal observations and student journals, it is clear to me that performing arts integration is an effective tool for building students’ competence in 21st Century Learning & Innovation Skills.

All sets of data show that nearly all students showed growth in all four skillsets: communication, collaboration, critical thinking, and creativity. There were a few students who did not show improvements in one of the skills. This might be because they did not have a large role in the production and did not feel as invested in it as the other students.

Gender was not a factor in growth, since both male and female students showed improvements. However, male students had a slightly higher percentage of improvement in communication and critical thinking skills and female students had a slightly higher percentage of growth in collaboration and creativity. This could possibly be linked to the personality traits of the students, rather than to their gender. Further studies would need to be done to determine whether or not performing arts integration actually enhanced communication and critical thinking skills more in males, and collaboration and creativity skills more in females.

GATE-identification was also not a factor in growth, since students at all academic ability levels showed improvements. Even though the findings show that more of the GATE-identified students scored a “Level 4: Professional” on their post-assessment, most of them had begun with a higher score on the pre-assessment than their non GATE-identified peers. This is likely because the 21st Century Learning & Innovation Skills are also skills that are characteristic of gifted students.

DISCUSSION OF RESULTS

New Insights into My Teaching Role

After reviewing the data from my study, and seeing the positive results that performing arts integration had on my students, I feel committed to finding new ways to integrate the arts into my everyday curriculum. As an educator, it is my job to prepare my students for their future. In today's world, it is no longer satisfactory to teach students subject matter knowledge alone, without teaching them learning and innovation skills. In order to thrive in their upcoming school years and to be competitive in the job market someday, students need to be taught how to communicate, collaborate, think critically and be creative. This performing arts integration project proved to me that the arts are, indeed, an effective strategy for building my students' competence in those aforementioned skills.

So, as I begin to plan for next school year I will, without a doubt, plan on directing my students in another content-related, musical production from Bad Wolf Press. In working on our class musical, "American Revolution," I learned that through the arts I could teach my students the key standards that they needed to know from our social studies standards, while at the same time help them to gain valuable life skills. And although it is not realistic to think that I could direct my students in an elaborate musical production for every unit that I teach, it is possible for me to integrate the arts in other ways throughout the school year. I can give my students opportunities to write and perform songs about science content, have them act out excerpts from the literature text, or deliver speeches as if they were key historical figures. There are countless ways that I could integrate the arts into my curriculum and give my students the opportunities that they need to foster 21st century learning skills.

New Insights into My Students

This action research project showed me that my 5th grade students were capable of so much more than I thought they were. Over the course of the six weeks that we worked on our musical production, I was constantly amazed by my students. In the past, when I had worked with youth organizations, outside the school setting, on performing arts productions, the children were never given much autonomy in the direction of the plays. Yet, in my classroom, I relinquished control, for the purpose of observing how well my students could communicate and collaborate with each other to come up with their own creative, original ideas and I was extremely pleased with the results.

One way that my students really impressed me was the way that they all worked so hard with their lines for the play. Not just in memorizing their lines, but also the way that they worked to understand the meaning of their lines so that they could truly articulate the message of their characters and the story of the Revolutionary War to their audience. Some of my students, who had been the most soft-spoken pupils in class all year, truly came out of their shells during the course of our production. They brought their characters to life on stage as they confidently engaged in dialogue, and sang about the events of the revolution.

My students also exceeded my expectations in the many ways that they worked together and collaborated over the course of our production. Even though my students had been working in cooperative learning groups all school year, they seemed to finally learn the importance of teamwork through their work on the play. I was especially awestruck to observe some of the male students, who had previously always relied on their peers to do the majority of the group work, finally contribute their talents. The opportunity to be involved in this performing arts production gave these students an invested interest in school that they did not have earlier in the

school year.

Conducting this research also showed me that my non GATE-identified students were just as capable of critical thinking and creativity as my GATE-identified students. As one of the GATE teachers at my school, I have often heard my teaching colleagues lament that their non GATE-identified students would not be capable of doing the type of project-based learning that I strive to do in my classroom. The data from this research clearly illustrates that all students, no matter what their academic ability level, will benefit from participating in arts-integrated classroom projects.

New Insights into My Theoretical Assumptions and Beliefs

I began this action research project with a strong belief that the arts are essential to developing the skills needed to be successful in life. That belief was reinforced by the results of this study. Both the quantitative and the qualitative data show that students who participate in the performing arts will increase their ability to communicate, collaborate, think critically and be creative. Since these 4C skills were outlined by the Partnership for 21st Century Learning Skills Framework in conjunction with the Common Core State Standards as the most instrumental learning skills that students should have in order to be successful in college, career, and in life, I now believe even more fervently that the arts are imperative to education and should be integrated into the other core subject areas.

Reflections on Ethical Issues

Prior to conducting the study, I presented my research question and data collection materials to the principal of my school, the chief analyst in the Department of Research and

Evaluation in my school district, and my educational research professor at Azusa Pacific University, in order to acquire approval to conduct my study. Since all of my students were under the age of 18, they were required to have a permission slip signed by their parent or guardian. I also provided pseudonyms for each of my students, in order to protect their anonymity.

Applications

The results of this study provided substantial evidence to support the use of performing arts integration in the classroom. With the current paradigm shifts that are happening in education today, it is an opportune time for educators to move away from instruction that is based on teaching to the test, and move towards teaching students the skills they need to be lifelong learners across all disciplines. Just as we are asking our students to step out of their comfort zones in the classroom, teachers, too, must step out of their comfort zones and be willing to try new approaches, such as the integration of performing arts activities.

In order to do this, I suggest that teachers first reflect on what their comfort level is with performing arts. In my case, I had an extensive background in the performing arts, so I was comfortable with challenging my students to put together a small musical production. However, many teachers without experience in the arts might not feel comfortable with staging a production of this caliber. Nevertheless, this should not deter them from integrating performing arts into their classroom at a lesser level. Teachers should know that they do not need a background in the arts in order to facilitate quality arts experiences for their students. They can begin by introducing their class to reader's theater plays, or by asking their students to collaborate in writing their own skits. Once teachers observe the skills that their students will

undoubtedly acquire from their performing arts experiences, they will, hopefully, be inspired to continue looking for ways to integrate the arts into their curriculum.

Next Steps of Inquiry

Even though I have established that performing arts integration is an effective tool for building my students competence in 21st Century Skills, I still have many questions related to this topic. For instance, I wonder if the higher-level thinking and innovation skills that my students demonstrated during their final performance would carry over into other activities, and projects in our classroom. Also, I think it would be interesting to track the students used in this study, so that I could assess whether or not they actually retain these skills and make use of them in their future when they move onto their college and career paths.

Limitations

As with any research study, this study had several limitations such as the sample size and age representation. First of all, the sample size of 34 students was too small to indicate any extensive effects. Furthermore, the results of the study were skewed by the fact that I only worked with 5th grade level students. In order to get more accurate data, I would need to replicate this study with other classes besides my own, including those of various grade levels.

CONCLUSION

Although many studies in the past have examined the value of arts education, few have gone so far as to give empirical data on the positive effects of arts education on elementary school students. This study illustrated that arts, specifically performing arts, are a powerful teaching tool. Both the quantitative and the qualitative data show that performing arts integration is an effective strategy for building students' competence in 21st Century Learning and Innovation Skills, such as communication, collaboration, critical thinking, and creativity. This means that students who participate in performing arts will gain the skills needed to meet the demands of higher education, a career and life in a global society.

The results of this study come at a critical time in education, one where the current paradigm is shifting. No longer will curriculum be driven by high-stakes testing. Instead, the curriculum will be guided by national Common Core standards and the Partnership for 21st Century Learning. As schools and districts transition into these new standards, and write new curriculum, educators need to be mindful of the fact performing arts integration is a useful teaching tool that can be used in all classrooms. Through performing arts integration, educators can help their students gain mastery of content knowledge, as well as the learning and innovation skills that they need to be successful in the future. They will give their students both roots and wings.

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APPENDICES

Appendix A	Permission Slip
Appendix B	21 st Century Learning Skills Inventory
Appendix C	Rehearsal Schedule
Appendix D	21 st Century Learning Skills Rubric
Appendix E	Costume Design Worksheet

APPENDIX A

February 21, 2014

Dear parent(s),

As you know, our class will be putting together a production called "American Revolution: The Musical" this spring. The purpose of this production is to integrate performing arts with our current ELA and social studies units on the Revolutionary War in order to give the students a deeper understanding of this important historical time period. It is my personal belief that experience in performing arts will enhance the students' learning and innovation skills, and prepare them for success in the 21st Century.

In addition to directing the production, I will also be observing the students and tracking their growth as they build their competency in the 21st Century Learning Skills: communication, collaboration, critical thinking, and creativity. These observations will be part of a research project on performing arts integration that I will be conducting for my Master's in Education from Azusa Pacific University.

I am writing this letter to ask for your permission to have your child be involved in this research study. If you do give your permission, your child will be assessed using a rubric that measures 21st Century Learning Skills. I also will be taking photographs of the students throughout the process. However, you will have an opportunity to see the photographs beforehand and approve their individual use in my research report. Students' names not appear on photographs and will be changed in the report. Once the research study is complete, I will make it available for you to view.

If you would like to have your child participate in my study on performing arts integration, please sign this form and return it to school as soon as possible. If you have any questions or comments about this project, please feel free to contact me.

Sincerely,

Sarah Seibert
(714) 564-8400
sarah.seibert@saud.us



I, _____, parent or guardian of _____, give consent for my child to participate in the performing arts integration research project that Mrs. Seibert will conduct this March in the classroom.

- I understand that neither my child nor the school will be named in any written document and that the report will only be used for a university class.
- I understand that I will have the opportunity to approve all photographs of my child before they are added to this research report.

Parent Signature _____ Date _____
21 de febrero 2014

Estimados Padre(s) de familia,

Como ustedes saben, nuestra clase trabajara en una producción llamada Revolución Americana: "The Musical" esta primavera. El propósito de esta producción es la integración de las artes escénicas con nuestras unidades actuales de ELA y estudios sociales en la Guerra de la Independencia con el fin de dar a los estudiantes un conocimiento más profundo de este importante período de tiempo histórico. Es mi creencia personal que la experiencia en las artes escénicas mejorará las habilidades de aprendizaje e innovación de los estudiantes y prepararlos para el éxito académico en el siglo 21.

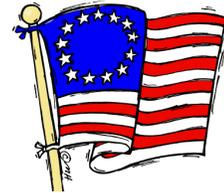
Además de dirigir la producción, también estaré observando a los estudiantes y su crecimiento a medida que desarrollan su competencia en las habilidades de aprendizaje: la comunicación, la colaboración, el pensamiento crítico y la creatividad. Estas observaciones serán parte de un proyecto de investigación sobre la realización de la integración de las artes que me llevaré a cabo para mi maestría en Educación de la Universidad Azusa Pacific.

Le escribo esta carta para pedir su permiso para que su hijo participe en este estudio de investigación. Si da su permiso, su hijo será evaluado usando una rúbrica que mide habilidades de aprendizaje del siglo 21. Yo también voy a tomar fotografías de los estudiantes durante el proceso. Sin embargo, usted tendrá la oportunidad de ver las fotografías de antemano y aprobar su uso individual en mi informe de investigación. Nombres de los estudiantes no aparecerán en las fotografías y se cambiarán en el informe. Una vez que el estudio de investigación se haya completado, voy a hacerlo disponible para que lo vea.

Si usted desea que su hijo/a participe en mi estudio sobre la realización de la integración de las artes, por favor firme este formulario y devolverlo a la escuela lo más pronto posible. Si usted tiene alguna pregunta o comentario acerca de este proyecto, por favor no dude en ponerse en contacto conmigo.

Atentamente,

Sarah Seibert
(714) 564-8400
sarah.seibert@saud.us



Yo, _____, padre o tutor de _____, doy consentimiento para que mi hijo/a participe en el proyecto de investigación de artes que va a realizar la Sra. Seibert y que se llevará a cabo este mes de marzo en el salón de clases.

Entiendo que ni mi hijo/a ni la escuela se nombrará en ningún documento escrito y que el informe sólo será utilizado para una clase de la universidad.

Entiendo que tendré la oportunidad de aprobar todas las fotografías de mi hijo/a antes de que se agreguen a este informe de investigación.

Firma del Padre _____ Fecha _____

APPENDIX B

Name _____ # _____ Date _____

21st Century Learning Skills Inventory (The 4Cs)

COMMUNICATION

1. What does COMMUNICATION mean to you? _____
2. Why do you think COMMUNICATION is important for your success in the future? _____
3. On a scale of 1-4, how skilled do you think you are at COMMUNICATING?
1 2 3 4
not skilled satisfactory good excellent
Why? _____

COLLABORATION

1. What does COLLABORATION mean to you? _____
2. Why do you think COLLABORATION is important for your success in the future? _____
3. On a scale of 1-4, how skilled do you think you are at COLLABORATING?
1 2 3 4
not skilled satisfactory good excellent
Why? _____

CRITICAL THINKING

1. What does CRITICAL THINKING mean to you? _____
2. Why do you think CRITICAL THINKING is important for your success in the future? _____
3. On a scale of 1-4, how skilled do you think you are at THINKING CRITICALLY?
1 2 3 4
not skilled satisfactory good excellent
Why? _____

CREATIVITY

1. What does CREATIVITY mean to you? _____
2. Why do you think CREATIVITY is important for your success in the future? _____
3. On a scale of 1-4, how skilled do you think you are at being CREATIVE?
1 2 3 4
not skilled satisfactory good excellent
Why? _____

APPENDIX C

"American Revolution" REHEARSAL SCHEDULE

<u>MON 2/24</u>	<u>TUE 2/25</u>	<u>WED 2/26</u>	<u>THU 2/27</u>	<u>FRI 2/28</u>
Skill: "Communication"	Skill: "Collaboration"	Skill: "Critical Thinking"	Skill: "Creativity"	Review & Reflect on 4C Skills
<u>MON 3/3</u>	<u>TUE 3/4</u>	<u>WED 3/5</u>	<u>THU 3/6</u>	<u>FRI 3/7</u>
Block Scene 1 Pg 5-7 "Tell Us Betsy" *Betsy *Student #1 *Student #2	Block Scene 2 Pg 7-10 "It's Great to Be an Empire" *George III *Counselor #1 *Counselor #2 *Betsy *Student #1 *Student #2	<i>none</i>	Block Scene 3 Pg 10-13 "Taxation" *John Adams *James Otis	Block Scene 4 Pg 13-16 "Down, Down, Down" *Sam Adams *John Paul Jones *Patrick Henry *Benedict Arnold *Betsy *Student #1 *Student #2 *John Jay
<u>MON 3/10</u>	<u>TUE 3/11</u>	<u>WED 3/12</u>	<u>THU 3/13</u>	<u>FRI 3/14</u>
Block Scene 5 Pg 17-19 "Ride On, Paul Revere" *Paul Revere *Rachel Revere *Joshua Revere *Harriet Revere *Betsy *Student #1 *Student #2 *John Jay	Block Scene 6 Pg 20-23 "Where Do I Sign?" *Clerk *Ben Franklin *Thomas Jefferson *John Hancock	<i>none</i>	Block Scene 7A Pg 23-26 "Bet You Can't Find Me" *Redcoat #1 *Redcoat #2 *Minuteman #1 *Minuteman #2 *Betsy *Student #1 *Student #2 *John Jay	Block Scene 7B Pg 27-30 "Home Shopping Network" *Betsy *Joshua Revere *Harriet Revere *General Rochambeau *John Paul Jones *Benedict Arnold
<u>MON 3/17</u>	<u>TUE 3/18</u>	<u>WED 3/19</u>	<u>THU 3/20</u>	<u>FRI 3/21</u>
Block Scene 8 Pg 30-32 "13 Little Countries" *Colonist #1 *Colonist #2 *colonist #3 *Betsy *Student #1 *Student #2 *John Jay	Block Scene 9 Pg 33-36 "Big States/Small States" *Clerk *James Madison *Alexander Hamilton *Big States *Small States *Betsy *Student #1 *Student #2 *John Jay	<i>none</i>	Block Scene 10 & 11 Pg 37-41 "Gonna Vote" *Voter #1 *Voter #2 *Voter #3 *Betsy *Student #1 *Student #2 *John Jay	Line Due! Speed Through
<u>MON 3/24</u>	<u>TUE 3/25</u>	<u>WED 3/26</u>	<u>THU 3/27</u>	<u>FRI 3/28</u>
Run Through 1-6	Run Through 7-11	<i>none</i>	Run Through 1-11	Costumes Due! Costume Parade Sing Through
<u>MON 3/31</u>	<u>TUE 4/1</u>	<u>WED 4/2</u>	<u>THU 4/3</u>	<u>FRI 4/4</u>
Dress/Tech Rehearsal	Dress/Tech Rehearsal	Dress/Tech Rehearsal	Performance! ☺☺☺	Cast Party ☺

APPENDIX D

21st Century Learning Skills RUBRIC

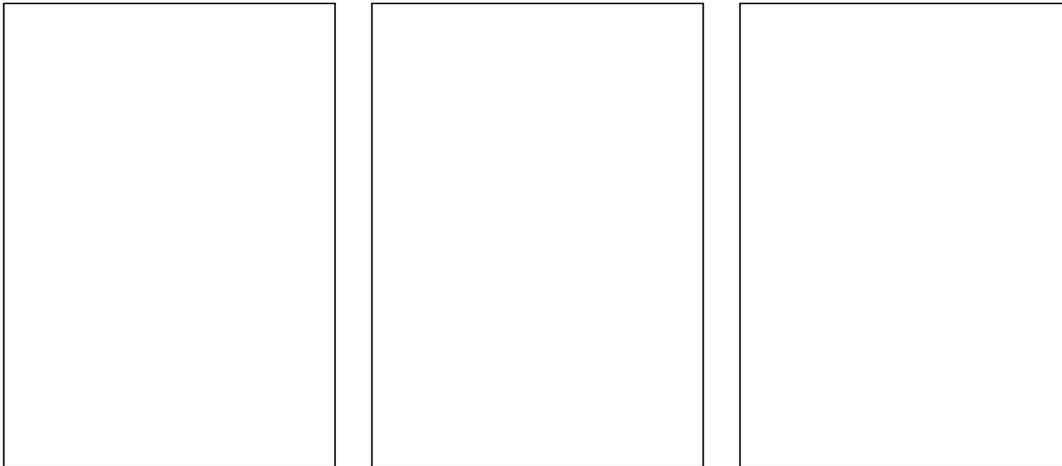
	NOVICE	AMATEUR	INTERN	PROFESSIONAL
 <p>Communication Sharing thoughts, questions, ideas, and solutions</p>	<ul style="list-style-type: none"> Words are softly spoken, mumbled, or unclear No eye contact is made with audience while speaking Knowledge of topic is not conveyed to audience 	<ul style="list-style-type: none"> Only some of the words are clear & audible Eye contact is made with audience some of the time Knowledge of topic is sometimes conveyed to audience 	<ul style="list-style-type: none"> Most of the words are projected & articulate Eye contact is made with audience most of the time Knowledge of topic is mostly conveyed to audience 	<ul style="list-style-type: none"> Every word is understood by audience Eye contact is made with intended audience Knowledge of topic is conveyed to audience
 <p>Collaboration Working together to reach a goal — putting talent, expertise, and smarts to work</p>	<ul style="list-style-type: none"> Never contributes skills, knowledge & opinions Does not value the skills, knowledge & opinions of group Relies on others to do the assigned work 	<ul style="list-style-type: none"> Sometimes contributes skills, knowledge & opinions Occasionally values the skills, knowledge & opinions of group Repeatedly needs reminders to do the assigned work 	<ul style="list-style-type: none"> Usually contributes skills, knowledge & opinions Often values the skills, knowledge & opinions of group Mostly does assigned work without reminders 	<ul style="list-style-type: none"> Actively contributes skills, knowledge & opinions Consistently values the skills, knowledge & opinions of group Always does assigned work without reminders
 <p>Critical Thinking Looking at problems in a new way, finding solutions across subjects & disciplines</p>	<ul style="list-style-type: none"> Quickly jumps to conclusions Does not recognize cause/effect relationships Unsure of opinion or ideas 	<ul style="list-style-type: none"> Comes to conclusions without getting clarification Recognizes cause/effect, but not their relationship Has an opinion, but cannot support it 	<ul style="list-style-type: none"> Asks clarifying questions when making conclusions Understands that cause/effect are connected Has an opinion and is able to justify "why" 	<ul style="list-style-type: none"> Draws conclusions based on sound information Analyzes cause/effect for specific improvements Has a strong opinion and can justify it with examples
 <p>Creativity Trying new approaches to get things done equals innovation & invention</p>	<ul style="list-style-type: none"> Never demonstrates evidence of original thinking Final product shows no evidence of personalization Never works to be resourceful & original to complete task 	<ul style="list-style-type: none"> Sometimes demonstrates evidence of original thinking Final product shows little evidence of personalization Rarely works to be resourceful & original to complete task 	<ul style="list-style-type: none"> Mostly demonstrates evidence of original thinking Final product shows considerable personalization Usually works to be resourceful & original to complete task 	<ul style="list-style-type: none"> Always demonstrates evidence of original thinking Final product shows extraordinary personalization Actively works to be resourceful & original to complete task

APPENDIX E

"American Revolution: The Musical" COSTUME DESIGN

Character: _____

Directions: Find 3 images on the Internet that we can use as inspiration in designing your character's costume for the show. Save the images to the documents folder. Then, click inside the boxes below. Insert your saved pictures from the documents file into each of the boxes. Then, answer the questions regarding your costume design below. After you have completed the costume design activity, print your design for the director. Please be sure to **SAVE** your work, in case you need to edit it at a later date! 😊



1. **(COMMUNICATION):** Why did you choose the pictures above as inspiration for your costume?

2. **(CREATIVITY):** What do you have at home, in your closet, or in a family member's closet that you can use as part of your costume?

3. **(CRITICAL THINKING):** What parts of your costume will you still need to borrow, have made or bought at a store?

4. **(COLLABORATION):** How will your costume be coordinated with the other members of your scene?