Examining Pre-Service Teachers’ Self-Efficacy for Enhancing Literacy of Diverse Learners through Music: A Creative Arts SoTL Project

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Examining Pre-service Teachers’ Self-Efficacy for Enhancing Literacy of Diverse Learners through Music:
A Creative Arts SoTL Project

Nancy McBride Arrington, PhD
RESEARCH QUESTION

in the Setting of Teaching/Learning

“What effect does integrating music in a read-aloud have on preservice teachers’ self-efficacy for meeting the diverse needs of K-2 students?”
My desire to enrich my preservice teachers’ experience by being able to:

• equip them to take skills gained from a creative arts class and apply them within their practicum experience,

• provide them opportunity for an increasingly richer and meaningful field experience through arts integration,

• draw from them a more critical level of reflection, and

• stimulate within them a higher sense of efficaciousness for addressing diverse learners as they journey through their Early Childhood Education (ECED) program.
This project is reflective of this definition of Scholarship of Teaching and Learning (SoTL):

- “...problem posing about an issue of teaching or learning, study of the problem through methods appropriate to disciplinary epistemologies, applications of results to practice, communication of results, self-reflection, and peer review” (Hutchings & Cambridge, 1999, p. 7).
MUSIC, LITERACY, and DIVERSE LEARNERS

- Teacher preparation programs are challenged with equipping their candidates with the tools necessary for meeting needs of diverse learners.
- Using music activities is one way to involve diverse learners in lessons.
- The use of music has benefits that contribute to literacy development in young students.
• Common Core State Standards Initiative (CCSS, 2012): Literacy instruction is the responsibility of all content areas, which includes music education.

• Similar themes are shared between CCSS for English Language Arts (ELA) and the National Standards for Music Education (NAfME, 2014).
Commonalities between these sets of standards include:
• demonstrating independence,
• having strong content knowledge,
• comprehending,
• critiquing, and
• understanding other perspectives and cultures
  (Weidner, 2013)
Other learning-to-read skills correlate with music literacy skills:

- phonological awareness,
- sight identification,
- orthographic awareness, and
- Fluency

(Hansen & Bernstorf, 2002)
Interdisciplinary Connections:

• “Studying works of arts as training in close observation across the arts disciplines and preparing students to create and perform in the arts” (Guiding Principles for the Arts, para. 2) enables students to actively participate in performance.

• Concepts of literacy can be taught and/or enhanced through music.
• In identifying and addressing needs of diverse learners in English Language Arts (ELA) classes, challenges include attention or focus; auditory processing (Arrington & Lu, 2014).

• Music contributes to focused attention and enhances auditory processing; provides students opportunity to attend to specific sounds, a basic of music learning (Bayless, as cited in Wolf, 1986).
• Focused opportunities using a variety of music, are important in the development of auditory abilities and provide “opportunities for children to determine the music they like and to make new connections with sounds they have never heard before” (Isbell & Raines, 2013, p. 194).

• Development of music and speech are shared – a “mutual interaction across domains” (Asaridou & McQueen, 2013, p. 1).
• Musical rhythm has been shown to positively affect auditory processing and speech/music perception (Skoe & Kraus, 2012; Tierney & Kraus, 2013).

• Lullabies and children’s play songs, with their simple structure, are crucial to the acquisition of the adult structure of tones and language (Saffran, 2002).

• Good music literacy can “provide the very same benefits as those who teach language reading, plus the enjoyment of an arts experience” (Bernstorf, 2013, p. 2).
SELF-EFFICACY

• “One's self-judgments of personal capabilities to initiate and successfully perform specified tasks at designated levels, expend greater effort, and persevere in the face of adversity" (Bandura, 1994, p. 71)

• “Perceived self-efficacy refers to beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments” (Bandura, 1997, p. 3).

• Perceived self-efficacy is not concerned with the amount of skill one has, but what he/she believes can be done with what he/she has in given circumstances.
Four determinants of self-efficacy:

• experience, or actual performance,
• modeling, or vicarious experiences,
• social persuasions, or verbal persuasion, and
• physiological factors, or cues

Experiences (referred to as *Enactive Mastery Experiences*) have the most influence on self-efficacy. For example, successes contribute to the building of self-efficacy and failures may undermine it. Difficulties can actually provide opportunities to learn how to turn failure into success (Bandura, 1997).
Preservice teachers (PST) and self-efficacy (S-E)

- S-E has a tendency to be established early on and becomes resistant to change.
- Should be given more opportunities for working with the students in a variety of contexts and levels of difficulty.
- Efficaciousness is affected by one’s motivation, which further affects achievement and the ability to achieve and persevere (Tschamannen-Moran, Hoy & Hoy, 1998; Zimmerman, Bandura, & Martinez-Pons, 1992).
RATIONALE

• Having preservice teachers identify diverse learners in their English Language Arts (ELA) K-2 classrooms, share a read-aloud with music integration, and reflect on the contribution of the experience to their young learners has potential to contribute positively to their ability to develop teaching strategies to meet literacy needs of diverse learners, increasing their self-efficacy of teaching in this area.
RATIONALE cont.

- The use of this strategy could result in an increased level of engagement and interaction in the K-2 placement, thus improving teaching and learning in both the Creative Arts Course and the Methods I Practicum.
METHODS
PARTICIPANTS

• 24 preservice teachers enrolled in ECED 3232, P-5 Creative Arts Methods
• Second-semester juniors, ages 20-23
• 23 Female; 1 Male
• 14 White; 5 Black; 3 Asian; 2 Hispanic
• Previous Arts Experience: 0(not at all) - 5(highest level)
  Music-3; Storytelling-2.75; Visual Arts- 2.96,
  Drama-2.04; Dance 2.63
• Concurrently enrolled in Methods I Practicum for
  Field Experience in Kindergarten, first, or second
  grade classrooms.
<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Click, Clack, Moo: Cows that type</td>
<td>Cronin, D. &amp; Lewin, B.</td>
</tr>
<tr>
<td>Dooby Dooby Moo</td>
<td>Cronin, D. &amp; Lewin, B.</td>
</tr>
<tr>
<td>Froggy Gets Dressed</td>
<td>London J. &amp; Remkiewicz, F.</td>
</tr>
<tr>
<td>Pete the Cat: The Wheels on the Bus</td>
<td>Dean, J.</td>
</tr>
<tr>
<td>Shake dem Halloween Bones</td>
<td>Lisa W. &amp; Reed, M.</td>
</tr>
<tr>
<td>Tacky the Penguin</td>
<td>Lester, H. &amp; Munsinger, L.</td>
</tr>
<tr>
<td>Thanksgiving at Our House</td>
<td>Hallinan, P.</td>
</tr>
<tr>
<td>The Little Old Lady Who Was Not Afraid of Anything</td>
<td>Williams, L.</td>
</tr>
<tr>
<td>The Napping House</td>
<td>Wood, A. &amp; Wood, D.</td>
</tr>
<tr>
<td>The Shy Scarecrow</td>
<td>Packard, M.</td>
</tr>
</tbody>
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RESEARCH DESIGN

MULTIPLE METHODS

Quantitative data:

• *Teacher Self-Efficacy Scale* (Bandura, 2006) as a pre- and post-test measurement

• Beginning, middle, and endpoint Likert rating scales relating to addressing diverse learners

• Attitude survey with Likert-scale rated items regarding the preservice teachers’ implementation of creative arts activities in their classrooms
Qualitative data:

- Written reflections
- Interviews
- Instructors’ field notes and feedback
- Relevant lesson plans and/or unit plans
- Open-ended responses from the attitude survey
- Preservice teachers’ artifacts from their experiences, e.g. photos of them engaging in their activities, sample charts/graphs
# RESULTS

## Quantitative

Table 1

*Pre- and Post- Scale Statistics*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Pre-test</th>
<th>Post-test</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>SE Scale</td>
<td>24</td>
<td>6.33</td>
<td>.78</td>
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*RESULTS*

Quantitative

Table 1

*Pre- and Post- Scale Statistics*
Table 2
*Pre- and Post- S.E. Scale Ratings*

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Post-</td>
<td>-.36</td>
<td>.81</td>
<td>.17</td>
<td>-2.18</td>
<td>23</td>
<td>.04</td>
</tr>
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</table>

P < .05
Table 3
Comparison of Means -S.E. Meeting Diverse Needs

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much can you do to get through to the most difficult students?</td>
<td>-.04</td>
<td>1.23</td>
<td>.25`</td>
<td>-.17</td>
<td>23</td>
<td>.870</td>
</tr>
<tr>
<td>How much can you do to promote learning when there is lack of support from the home?</td>
<td>-.29</td>
<td>1.00</td>
<td>.20</td>
<td>-1.43</td>
<td>23</td>
<td>.166</td>
</tr>
<tr>
<td>How much can you do to keep students on task on difficult assignments?</td>
<td>-.04</td>
<td>1.33</td>
<td>.27</td>
<td>-.15</td>
<td>23</td>
<td>.880</td>
</tr>
<tr>
<td>How much can you do to increase students’ memory of what they have been taught in previous lessons?</td>
<td>-.63</td>
<td>.92</td>
<td>.19</td>
<td>-3.32</td>
<td>23</td>
<td>.003</td>
</tr>
<tr>
<td>How much can you do to motivate students who show low interest in schoolwork?</td>
<td>.08</td>
<td>1.02</td>
<td>.21</td>
<td>.40</td>
<td>23</td>
<td>.692</td>
</tr>
</tbody>
</table>
Three Ratings – 1- Beginning; 2-Midpoint; 3-Endpoint

- Students’ diverse needs can be accommodated through participating in...
- I feel comfortable teaching a music-integrated lesson at this point.
- I feel comfortable teaching diverse learners at this point.
- Using music-integrated lessons for teaching literacy requires a special talent.
- Using music-integrated lessons for teaching literacy requires serious effort.
- Teaching diverse learners requires a special talent.
- Teaching diverse learners requires serious effort.
How does implementing the Music Literacy project with K-2 students compare with implementing projects with peers in class?

A. Contributing to my efficacy for meeting needs of diverse learners in the elementary classroom

B. Contributing to my understanding of integration of creative arts in the elementary classroom

C. Contributing to my efficacy for integration of creative arts in the elementary classroom

Most effect with Creative Arts Projects with Peers
Same effect with both
Most effect with Music Literacy Project with K-2 students
How likely are you to use this project in your classroom?

How likely are you to use a similar project in your classroom?
RESULTS

Qualitative

Themes emerged:

Preservice Teachers’ (PST) Learning

P-5 Students’ Learning/Diverse Learners

Classroom Management
PST LEARNING:

- It made me realize that with a little extra time and planning, music can be integrated into other curricular areas and the students can learn a lot from it. It was so much fun and the students loved it. They would have loved just reading Tacky and doing an activity about it for ELA, but they loved it even more with the integration of musical aspects and instruments (PST#1).

- “It helped me see firsthand by being involved that you can teach content in different ways other than a typical lecture” (PST#2)
• It was hard work putting this together and setting this up. But it was worth it. The students loved it and I had a lot of fun reading to them with excitement and helping them know when it was their part to play the instrument. Setting all the instruments up was fun because I learned about new kinds that I had never heard of or played before (PST#1).

• “It definitely helped me see the importance of using creative arts in the classroom” (PST#2).
• “I think this activity showed me to think outside the box when planning activities for my students” (PST#4).

• It also made me think of different aspects of creative arts that could be used to help diverse learners, especially if they are more drama filled or movement/dance filled. It would work best to incorporate all aspects of creative arts in the classroom to make sure that all students enjoy and learn in the classroom when creative arts are involved in the classroom (PST#6).
• It made me want to incorporate music into my lessons more often. I saw that the students enjoyed making music with the instruments and that makes me want to see my future students enjoy using music in lessons as well (PST#8).

• Implementing this activity impacted me as a teacher by showing me that a little effort in a lesson goes a long way. This lesson had the potential to go horribly wrong. I was very nervous to give a group of six year olds musical instruments, but with a well thought out behavior management plan and a little enthusiasm I was surprised at how well it went (PST#9).
• I loved watching the students during this activity as they had such a good time! At first I was rather apprehensive, thinking I would have a hard time controlling the students while they all were playing. However, the lesson far exceeded my expectations. (PST#10).

• I really liked that we were able to do this with our elementary class instead of trying it on our fellow classmates. It gave me a better idea of how it would be if I used it in my future classroom (PST #11).
P-5 STUDENT LEARNING/DIVERSE LEARNERS

• This activity impacted the diverse learners by keeping their interest and it gave them something to do hands on, which really helped them stay focus [sic] and on task (PST#3).

• I have a class that normally misbehaves a lot. But conducting this activity got everyone involved and they loved it. I was actually shocked at how well they all participated (PST#2).
• I think doing activities like this can really help you get your students involved and actually want to participate (PST#3).

• The students were really excited because they are always eager to have a specific role in the lesson and they love singing (PST #4).

• After hearing “Wow, this is fun!” and “I wish we could do this a lot more” from my students, I realized the impact that the instruments had on their interest and overall participation and comprehension of the reading and the story. I will definitely use music in my future classroom (PST#5).
During this lesson students needed to pay special attention to their specific roles, listening carefully for their cues to play their instrument. Specific students were assigned certain instruments for a reason. For example, an ADHD student was assigned to play a house during the lesson, allowing him multiple opportunities to stand up and move during the lesson. Additionally, a QUEST student and other higher level students were assigned bells, which required them to listen more frequently for their cue to play. Students with an IEP were placed in a large group with other students, this group acted as a guide to help these students know when to play. However, regardless of the instrument assigned, all students were able to stay engaged during the lesson as everyone was actively listening for their assigned cue. On top of this, by hearing the sounds and seeing the motions, both visual and auditory learners were able to more closely follow along with the story, thus aiding their comprehension of the text (PST#9).
• My student with 504 plan did well because I let him be the leader (PST #15).

• The Popsicle Stick Characters helped the kinesthetic learners with hands-on and the English Language Learners (ELL) with a visual representation (PST#13).

• My students were remembering the other students’ roles and helping them remember (PST#17).
CLASSROOM MANAGEMENT

• *Proactive*
  • Sticky notes to help them remember their part
  • Practiced the activity ahead of time
  • Explained activity and practiced proper use of instruments
  • Pre-formed groups for success
  • Set it up ahead of time

• *Reactive*
  • “You get what you get!”
  • Stickers for reward
General

• I am very happy that I had to do this music literacy lesson this semester. I have never really enjoyed music or wanted to teach with it but after the lesson I will definitely be doing it more often in my career (PST#9).

• My lesson went perfectly. The CS said it was the best lesson ever! (PST#12)

• My CS said she’d do this lesson this way next time! (PST#14)

• Every student had a smile on their face during this lesson, and it was so lovely to see! (PST#10).
LIMITATIONS

• Specific to one course/one semester;
• Smaller enrollment for fall semester
  – Comparison of two classes original design
• S-E Scale
• Focus only on music integration
  – Other arts areas not emphasized in this project
CONCLUSION

• Implementing music integrated literacy lessons with their P-5 students contributed to the preservice teachers’ self-efficacy for meeting the needs of diverse learners

• As a result of this project, the preservice teachers are very likely to integrate music in their literacy lesson with their P-5 students in the future.

• The preservice teachers learned about themselves as well as about their P-5 students through this project.

• Through this SoTL project my teaching and my students’ learning were enhanced, thus leading to the attainment of my goal.
RECOMMENDATIONS

• During methods courses pre-service teachers to be allowed/required more hands-on opportunities with P-5 students

• Follow-up study with teachers to determine their use of music-integrated lessons

• More studies of meeting needs of diverse learners using arts-integration lessons (with preservice teachers and their P-5 students)
“Programs have the capacity to ensure that coursework is tied to field experiences and that critical reflection is interwoven throughout the educational experience... Resilient teachers are those that can think deeply, problem solve, and feel confident in their ability to meet the needs of their students. This leads to high levels of self-efficacy, which in turn leads to greater persistence and risk-taking” (Yost, 2006, p. 74).
REFERENCES


REFERENCES (Cont.)


