

The Power of Unhappy Endings

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This case study examines the integration of a teacher-created digital game into the elementary music curriculum on several campuses in two countries, exploring its impact on student engagement, learning outcomes, and classroom culture. Originally developed as an extension of a traditional music lesson featuring a puppet, the game was designed to reinforce the learning of a target melody by incorporating the melody as background music within gameplay. Using an autoethnographic reflection and case study approach, this paper analyzes the evolution of the puppet's story that forms the base of the lesson, how students responded to the digital adaptation of the story in game form, and how the addition of the game affected instructional time dedicated to the melodic acquisition of the target melody.

The findings suggest that embedding musical concepts within a digital game environment may enhance student engagement and efficiency in learning. Additionally, the use of a puppet, structured narrative, and digital game increased the ability of the teacher to integrate Social Emotional Learning (SEL) concepts naturally into the lesson.

Keywords: Music education, digital games, puppets, melody, story

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Introduction

The role of storytelling through a variety of media in education has been widely examined by scholars with research consistently highlighting its effectiveness as a pedagogical approach (Rahiem 2021). Similarly, puppetry has been recognized as a valuable tool in education. Kröger distilled the research on the use of puppets in education to reveal five classroom uses for puppets: Generating communication, supporting a positive classroom climate, enhancing creativity, fostering co-operation in and integration into a group, and changing attitudes (2023). Research by Aminimanesh et al. (2019) indicates that puppet shows can be used effectively to change targeted behaviors in kindergarten students.

The integration of digital games in education is a rapidly expanding area of research. Adipat et al give an excellent overview of the research in game-based learning and digital games in their work *Engaging Students in the Learning Process with Game-Based Learning*. In their work, Adipat et al outline three fundamental approaches to Game-Based Learning: narrative-centered learning theory, problem-solving theory, and engagement theory (2021).

Within the field of music, research by Jackie Lordo on deliberate play in music education suggests that when educators create more opportunities for deliberate music play (play which is engaging, process-oriented, and flexible), young musicians can more naturally acquire the experience needed to advance their musical skills without the sole reliance on the arduous task of deliberate practice (2021). This research—when considered with that done by Cash et al in 2014, which demonstrated that repeatedly listening to a target melody can significantly reduce the time required for students to learn and accurately perform that same melody—suggests the

potential for creating enjoyable digital educational experiences such as games as an educational platform for deliberate music play to support young musicians in the acquisition of fundamental musical skills.

This paper presents a reflective, autoethnographic case study exploring the intersection of storytelling, puppetry, and digital game-based learning in Music Education. By analyzing the implementation and impact of these methodologies across multiple years and diverse student populations, this study seeks to contribute to the existing body of research and establish a foundation for further inquiry into the potential collaborative and hybrid benefits between these approaches.

Background

In this case study, I reflect on the addition of a digital game into an already successful musical lesson that included a puppet personality and engaging origin story.

The Puppet

The original puppet known as *Bonnie Blob*, is approximately 21 cm (8.25 inches) tall and 20.5 cm (8 inches) wide. It features a purple body with a seemingly happy face that includes a smile, three yellow teeth, bright green antennae, and rounded hands that are green on the front and purple on the back. Constructed from soft polyester, the puppet's head is slightly stuffed and fits comfortably over the puppeteer's hand. The antennae are made from felt, and the face is embroidered, remaining fixed in expression. The puppeteer can control the head's movement by bending it down and can animate the hands using their thumb and pinky fingers. The puppet was gifted to me by a friend and chosen for this lesson because its availability and size made it easy to transport between campuses. Due to the nature of the rights agreement between the puppet company and the distributor, the puppet company could not offer the image rights for the puppet's picture to be included in publication.

The Target Melody

The target melody for this lesson is *Bounce High, Bounce Low*. *Bounce High, Bounce Low* is a popular song in elementary music classrooms across the United States often taught in kindergarten, first, and second grade because of its simple three note melody (sol, mi, and la). Due to its popularity, it is often featured in the elementary music curriculum and on music education websites such as "Beth's Notes" (2025). This melody was selected because it features the melodic concept of sol, mi, and la, which is a beginning tone set in the Kodály methodology (Choksy, L. 1999) which was the required curriculum for the original lesson.



Figure 1. Bounce High Bounce Low Melody transcribed for reference

The words to the song vary slightly depending on the source. The version I learned is from Keith Robinson by observing his music class in 2010. This version depicts a friend and the lyrics describe the actions of the ball bouncing, following the shape of the pitches in the melody:

Bounce high, bounce low,
Bounce a ball to Shiloh
Bounce it up
Bounce it down
Bounce the ball all around.

Additionally, the song references a bouncing ball, making it ideal for an interactive game that offers critical moments that are essential for instruction in classroom expectations for movement, singing, and turn-taking.

The Story

Bonnie's story follows a somewhat surprising theme of apocalyptic survival. Although this theme isn't central to the teaching of the musical concepts, it does have pedagogical merit, as became evident in the evolution of the story and lesson. In the story, *Bonnie*, her friend *Shiloh*, and her younger brother *Bobby* go to the park for a picnic. While playing *Bounce High, Bounce Low*, *Bonnie* gets distracted and misses the ball. The ball rolls away from the friends and the play area. *Bonnie* chases the ball. Suddenly, shoes appear in the play area, stomping through the town, destroying everything—including the park. Miraculously, *Bonnie* survives the attack because chasing the lost ball took her to safety, leaving *Bonnie* as the sole survivor. The story concludes when *Bonnie* leaves the “Land of the Blobs” and meets the author (me), who brings the scared little blob to music class. Although *Bonnie* escapes without physical injury, she is traumatized by shoes and remains afraid of them.

The Game

Bonnie Blob The Game (Fimbel, 2023) is an interactive web application designed by me, Mary Eleanora Fimbel, in March 2023 using the Unity game engine. The game features simple graphics, a few photos of the puppet, and a simple music soundtrack created using Chrome Music Lab's “Song Maker” (2023). The game includes six sections:

- 1 **Main Menu** – a navigation page with the target melody as background music.
- 2 **Meet *Bonnie*** – Introduces the puppet with basic details like age and favorite food. Features the target melody, *Bounce High*, *Bounce Low*, and an ostinato.
- 3 **The Game** – The player, controlling *Bonnie*, avoids falling feet to reach a red ball. Features the target melody as a variation on the theme.
- 4 **Explore** – An unfinished section intended to evolve into a park setting. Featuring the theme with ostinato.
- 5 **Credits** – Acknowledges contributors such as the Code Coven program, IGA, and mentor Keith Robinson. No sound.
- 6 **Storybook** – Originally a simple, short text version of *Bonnie's* story. The current version of the game now includes a digital children's book with simple illustrations created in Canva along the target melody.

The Students

The *Bonnie Blob* lessons and story have evolved over a nearly fifteen-year time span beginning in 2011, during which I taught at five different campuses. The lesson and story began on Campus A and Campus B concurrently and then continued to develop on Campus C. The digital game was introduced initially to Campus D and the following year to Campus E.

Campus A was a large Title 1 elementary school serving students from preschool to grade 5, where I worked during the 2010-2012 school years. With over 600 students—most of whom were from low-income families—the campus had a diverse demographic, with a high percentage of Hispanic and Black students, and a smaller White student population. The school was located in a small Texas city, with many families connected to the military. During my time there, I was one of two music teachers, teaching only half of the students in grades PK-2.

Campus B was a large Title 1 elementary school with enrollment that fluctuated between ~900 and ~1,300 students during my time there. For two years, I worked mornings at Campus A and afternoons at Campus B, and one year I worked full-time at Campus B. As one of three music teachers, I taught roughly one-third of all students in the grades I worked with, which varied a bit year to year but always included first and second grade. Campus B was located in a small Texas city near a military base, but in a higher socioeconomic area compared to Campus A. The school remained diverse, with a significant number of Black and Hispanic students, and many families with military affiliations.

Campus C was a Pre-K through 5th grade Title 1 elementary school in a dense urban area, with enrollment ranging from ~600-900 students. I worked at this campus for eight years ending in 2021. Over 80% of the students were from low-income families. The campus served several special populations, including dual language (Spanish/English), bilingual (Spanish/English), and English as an Additional Language (EAL) students. The demographics were predominantly Hispanic, with notable subpopulations from the Middle East, Asia, the Pacific Islands, and a smaller percentage of Black and White students.

Campus D was a Title 1 public charter elementary school located in a large Texas inner-city area, with approximately 400 students in Kindergarten through 4th grade. The student population was primarily Hispanic/Latino, with smaller percentages of Black and White students. Notably, the campus supported a large population of neurodivergent students due to the specific goals of the founding charter.

Campus E was a Preschool through Year 10 campus located in a rapidly developing suburban area with a range of housing options, from newer family homes to multi-family units, on the outskirts of a large city in the Australian Capital Territory. I worked in the Primary School (Kindergarten through Year 6), with an enrollment of ~450 students in the Primary school. The student body was diverse, including Aboriginal and Torres Strait Islander, Indian, Filipino, and Anglo-Australian students. Socioeconomically, Campus E was comparatively higher than the other campuses in which *Bonnie Blob* was introduced.

Students from each campus had interactions that are reflected in this paper, with the greatest number of students participating being from grades kindergarten to third grade. However, especially after the addition of the digital game, students in grades four, five, and six were also included. The diversity of the campuses and of the students themselves provide a broad range of student interactions and rich context for this case study.

Bonnie Blob's Story Creation and Game Integration

An adaptive story

Although this paper focuses on the integration of the digital game in 2023, it is important to acknowledge that this lesson has always been highly adaptive. The story of *Bonnie Blob* has evolved over the years to align with the social-emotional learning (SEL) needs of students, reflecting their lived experiences and concerns.

The original version of the story was created for students on Campus A who struggled with moving safely around the very small space we had for music class. *Bonnie's* original fear of feet was designed to help students remember to move safely. Many children on Campus A had one or both parents serving on active duty in the United States Army. It was common for these parents to be on or returning from active deployment in Iraq as part of the Iraq War. For these students, a narrative centered on survival offered a sense of hope, while the sad outcome for *Bonnie's* family balances hope with the truth that not everyone comes home. In its initial form, *Bonnie* eventually met another survivor of the shoe apocalypse, and they got married and lived "happily ever after," However, this ending never felt entirely fitting to me.

After transitioning to Campus C, I sought student feedback on different aspects of *Bonnie Blob* and her story. I was concerned that the story might be too distressing, but also felt the ending didn't fit the authenticity of the story. During the discussion, when asked about the story and whether it made sense for *Bonnie* to meet another survivor, one student responded candidly, saying, "I hate how all kids' stories always have a happy ending. That just isn't how life is." The other students emphatically agreed. At that moment, I recognized the power of unhappy endings to speak the lived experience of my students and the value of that reflection for them. From that point forward, *Bonnie* became the sole survivor of the apocalypse.

The next significant adaptation emerged in response to shifting social realities, following the tragic attack at Sandy Hook Elementary School in 2012. As a response to this tragedy and the increasing threat of school shootings, schools across the United States reevaluated safety protocols and increased the frequency of lockdown drills (Rygg 2015). During this period, my students became increasingly anxious about potential dangers on campus, particularly about what to do if they were outside and unaccompanied during such an emergency. As we discussed various safety strategies, the students identified a large cement drainage pipe as a possible hiding place, provided it was not raining. This conversation led me to a realization: if *Bonnie* also survived by hiding in a drainage pipe, it could serve as a subconscious reinforcement of this survival strategy. By embedding this element into the story, students might more readily recall this potential shelter in the event of an actual crisis.

Adaptations such as these illustrate the evolving nature of *Bonnie Blob's* story and its associated lessons, shaped by student input, real-world events, and the changing emotional and psychological needs of the learners it was designed to support. The iterative nature of *Bonnie Blob's* story highlights the power of storytelling as a dynamic tool for Social-Emotional Learning, one that can adapt to provide meaning and reassurance in response to students' lived experiences.

Creating the Game

In March 2023, while enrolled in *Introduction to Game Making with Unity* through Code Coven ("Intro to Game Making"), I had the opportunity to develop my own digital game. My goal was

to create something that would have practical applications in my life—something that was more than just a fun game. This desire to design something meaningful led me to adapt *Bonnie Blob*'s story into an interactive game. Initially, I considered designing a game centered on my snail puppet, which had been particularly popular among my students, especially at Campus C. However, I ultimately chose to create the game about *Bonnie Blob*, as her narrative—centered on survival and avoiding the “stomping feet”—seemed inherently well-suited to a game format.

My design for the game was also influenced by research (Cash et al. 2014) indicating that hearing a melody repeatedly can reduce the time required to learn to sing or play it. This insight resonated with challenges I had been facing in the post-COVID classroom, particularly with inconsistent student attendance (Swiderski et al. 2024). Frequent absences meant that many students missed initial instruction on new melodies, requiring significant time to reteach material in subsequent classes. As a result, we struggled to progress beyond foundational learning into deeper musical concepts at the pace I had maintained at my various campuses in pre-pandemic years.

With this in mind, I hypothesized that integrating the target melody into the background music of a game could provide students with additional exposure both in and outside of class. By engaging with the game at home, absent students could have more opportunities to internalize the melody through passive listening, potentially reducing the need for in-class repetition and allowing for more advanced musical exploration. Motivated by this potential, I dedicated my spring break to designing and developing *Bonnie Blob: The Game*.

Introducing the Game

Campus D fostered an affirming and supportive environment that encouraged open discussions about mental health and self-expression. Given this context, when *Bonnie Blob* returned from spring break, she introduced the digital game as something her therapist had suggested she create to honor the memory of her friends and family. The game was introduced through *Bonnie*'s storytelling and sharing of the song, following the established pattern of the lesson. However, rather than concluding with only the song, or the song and a ball tossing game, *Bonnie* invited students to engage with the digital game, providing another interactive extension of her narrative.

The game was played one student at a time with the game projected on a screen so that the entire class could observe and sing along to *Bounce High, Bounce Low*, which played in the background both in the game and during the menu between game plays. Student selection was optimized with classroom management strategies which varied depending on student dynamics; in some classes, students selected the next player, while in others, the order was determined by seating arrangements to better accommodate differences in patience and engagement levels. In some classes, every student was able to play in one class period, while in others, the session was spread over two or more class periods.

Student responses were overwhelmingly positive. One student, upon seeing the game for the first time, excitedly asked, “Is this game viral, or about to become viral?”—a moment that underscored the game's potential for both popularity and broader educational impact. Additionally, students demonstrated a greater willingness to sing along with the melody embedded in the game than they had when singing unaccompanied and solely for the puppet, suggesting that the interactive digital format may have enhanced their engagement with the musical material. Similarly, the flow between students was smoother, allowing more repetitions

of the song to naturally occur compared to the traditional ball tossing game that we played along with the song in class.

In response to student feedback, several modifications were made to the game's musical components. Additional variations of the background melody were introduced, including the melody paired with an ostinato, different instrumental arrangements, and a theme and variation for the main game. These adaptations expanded the game's relevance for older students and provided concrete, relatable examples for introducing musical concepts such as ostinato and theme and variation. Furthermore, the inclusion of the ostinato phrase "Will you be my friend?" created a natural connection to another song, *Make New Friends* (Thompson, B. 2013), allowing for a seamless extension of the lesson. These musical improvements, along with the increased focus on social-emotional learning at Campus D, further supported *Bonnie Blob*'s evolving role in the classroom, enabling more intentional integration of social-emotional skills into music instruction.

Bonnie's Adventure Down Under

In 2024, upon beginning my teaching role at Campus E, I introduced *Bonnie*, her story, and the accompanying digital game as part of a structured sequence of lessons. Compared to previous iterations, the presentation of these lessons felt more refined and rehearsed. This shift was largely due to the addition of a short text version of the story within the digital game, as well as the development of a full-length storybook version of *Bonnie's* story during the six-month period between my teaching positions. The storybook featured a more structured narrative, expanded descriptions, and illustrations created in Canva. Although I didn't introduce the story book with this campus initially, creating it did influence my presentation of the story. So while *Bonnie* continued to narrate her story to students before introducing the game, the refined storytelling structure resulted in greater consistency, minimizing student questions about the plot and ensuring a more uniform delivery. Despite these changes, student engagement and emotional connection to *Bonnie* remained strong. In fact, the clearer and more detailed narrative appeared to enhance students' connection to the character, as they more readily grasped the gravity of her situation. Notably, whereas students in previous settings often required multiple tellings of the story or direct questioning about the plot to realize that *Bonnie's* family had perished, learners at Campus E more frequently recognized this aspect of the story upon their first exposure.

A significant difference observed at Campus E was the students' emotional response to *Bonnie's* tragedy. In prior contexts, learners generally accepted the narrative as a plausible, albeit fictional, event. However, at Campus E, where students came from a higher socio-economic background and were supported by a more comprehensive social safety net, their reactions differed markedly. Rather than empathetically accepting *Bonnie's* loss, many students actively sought ways to mitigate or reverse her misfortune. Several learners expressed this through creative means—one student drew a potion bottle and presented it to *Bonnie*, suggesting that if she poured it around her, it would revive her family. Another student wrote a story in which *Bonnie* was reunited with her lost loved ones. These responses provided valuable opportunities for social-emotional learning discussions, particularly around the concept that not all adversities can be undone. These discussions focused on reframing *Bonnie's* journey—not as one where her past suffering is erased, but rather as a story of resilience and adaptation, in which she finds a new community—the students—that support her.

In terms of musical learning outcomes, students at Campus E demonstrated the fastest acquisition of the target melody compared to previous campuses. Additionally, they exhibited

greater accuracy in remembering both the melody and its accompanying lyrics, suggesting that a combination of structured storytelling and interactive gameplay may contribute to improved retention of musical material.

It is important to note that there may be other contributing factors to the success at Campus E. For example, like the other campuses, Campus E included students for whom English was an additional language. However, the overall English proficiency of students at Campus E appeared to be significantly higher than that of students at Campus C. A direct comparison of the language abilities at the other campuses could not be accurately made due to insufficient information and the researcher's limited recollection. This variability in language proficiency may have influenced students' comprehension and engagement with the song lyrics and the story, highlighting the need for further research into the role of language background in narrative-based music learning.

Findings

Increased Learner Engagement Through Puppet Interaction

Across all campuses, the introduction of the puppet as a pedagogical tool led to a notable increase in learner engagement. As my proficiency in puppetry improved, both the frequency and depth of student interactions with the puppet also increased. Over time, *Bonnie Blob* evolved beyond a mere instructional aid, assuming a role akin to that of a class mascot or pet. This shift was evidenced by students' behaviors outside of the weekly forty minutes of instructional time—many regularly visit my office window after school to wave at *Bonnie*, others mentioned finding the game online and playing at home, demonstrating a level of attachment and engagement that extended beyond the immediate lesson. These observations align with the observation of Karaolis 2006, who noted that puppets “See the Goodness,” which supports the effectiveness of puppetry in fostering student participation and emotional connection in educational settings.

The Digital Game as a Tool for Building Rapport and Engagement Among Older Learners

An unexpected—but potentially significant—outcome of creating the digital game myself was the increase in rapport and respect for me among older students, particularly those in grade four at Campus D and grades five and six at Campus E. In my experience as a teacher, I see that older learners often exhibit a divided perspective of life with “school” and “real life” seeming to exist as separate entities and where educational content is perceived as separate from authentic “real world” experiences. However, when students recognized that *Bonnie Blob: The Game* was developed using Unity—a professional level game engine widely used by 61% of the game design industry (2021 Gaming Report)—their perception of both the lesson and my role as an educator shifted. Rather than viewing me solely as a Music Teacher, students began to see me as a Game Designer, a role that carried greater value in their eyes. This aligns with research by Raufelder et al (2016), who found three themes in students' view of their teacher: Quality of the teacher-student relationship, teacher expertise, and teacher's personal characteristic. Suggesting that my use of Unity and its connection to “real life games” increased my “teacher expertise,” while the act of developing a game increased my “personal

characteristics,” and sharing something I made—especially given that it was in a semi-finished prototype stage—increased our “student-teacher relationship.”

Furthermore, several students expressed recognition of the use of web application *Chrome Music Lab* as my platform for composing the game’s simple soundtrack, a tool they had previously encountered and enjoyed in classroom settings. *Chrome Music Lab* is often perceived by students as a simple educational resource. However, its integration into a fully realized game challenged this perception, demonstrating the potential for its creative and functional application beyond the typical classroom use. This realization not only increased students’ interest in *Chrome Music Lab* but also heightened their interest in game design and their willingness to share their own unpolished creations. The shift in the student perspective of *Chrome Music Lab* highlights the potential for both the value of digital game-based learning and game design-based learning such as that explored by Weitze (2016) to enhance student engagement by bridging the gap between classroom instruction and real-world applications and experiences through student developed games.

Increased Repetitions of the Target Melody Through Digital Game Integration

The integration of the digital game into music instruction did indeed facilitate the hearing of more repetitions of the target melody within a given class period, resulting in a reduction in the time required for students to internalize and reproduce the melody, *Bounce High, Bounce Low*, as predicted by Cash et al (2014). Although no formal quantitative data was collected to measure the exact decrease in instructional time, observational evidence suggests that the learning process became more efficient, allowing for more time, and more enjoyment of not only the digital game but also the physical ball-bouncing game and further exploration and analysis of the melodic make up of the song. It should be noted that it is possible that my increase in teaching experience and confidence over the time of this project also contributed to this improvement in student performance, given the temporal gap between the initial implementation of the lesson and its more recent iterations.

Further controlled studies are necessary to quantitatively assess the extent to which the digital game and passive exposure to the target melody contributed to efficiency of the melody’s acquisition. However, from a practical standpoint, students appeared to learn the melody more naturally, enabling the class to allocate more time to musical extensions and interactive activities. Additionally, several students independently located *Bonnie Blob: The Game* online and reported playing it at home. This suggests that increasing the accessibility of the game could further support students’ independent practice—or at least exposure to the musical content—outside of the classroom, reinforcing musical concepts beyond structured lesson time.

Natural Comprehension of Theme and Variation Through Gameplay

Students demonstrated an intuitive understanding of the concept of theme and variation as a result of the additional musical variety that was implemented as a result of student feedback after the first round of play testing. During gameplay, some learners independently recognized that the melody accompanying the shoe-avoiding portion of the game was not identical to the version sung in class. They noted that although the melody was different, the simple melody could still be heard and sung with this altered version of the melody. This natural observation provided an organic entry point for discussions of the musical concept of theme and variation, allowing students to engage with the material in an experiential manner rather than through

direct instruction. The ability of students to perceive and articulate these variations suggests that embedding musical concepts within gameplay can serve as an effective pedagogical strategy for reinforcing or introducing abstract musical ideas.

Strengthened Sense of Community Through Shared Gaming Experience

The incorporation of the digital game into the classroom environment kindled an increased sense of camaraderie and social connection among students. The collaborative nature of gameplay—where students observe their peers, cheer each other on, and share insights and support—contributed to a supportive and engaging learning atmosphere. Outside of the classroom, students were observed discussing *Bonnie Blob* on the playground and between classes. Students often approach me to share their own narratives or imagined friendships for *Bonnie*. These spontaneous interactions indicate that the puppet, their story, and the game's influence has extended beyond its instructional purpose, becoming a shared cultural experience that has strengthened peer social relationships and bonding on individual, small group, class, and perhaps even campus level. This suggests that this hybrid of puppets, storytelling, and game-based learning can enhance both academic and interpersonal development.

Increased Emotional Engagement Through Visual Representation of *Bonnie's* Story

An additional observation was the heightened emotional response from students upon seeing *Bonnie* visually depicted in the digital game. While students were previously familiar with *Bonnie's* narrative through storytelling and puppet interactions, witnessing her character being threatened and potentially squashed by shoes within the game appeared to deepen their understanding of her experience. This visual representation seemed to evoke greater empathy and compassion, as students more fully grasped the impact of her loss and the implications of her survival. While on the initial play-through, students universally attempted to avoid the shoes, it is worth noting that in nearly every class, after a few repetitions of the game, students became interested in what happened if they let *Bonnie* get squished by the shoes, generally becoming saddened when the “You’ve Been Smashed” Game Over screen informs them of *Bonnie's* demise.

Personal Reflection on Identity Through the Development of *Bonnie Blob*

Beyond its pedagogical applications, the development of *Bonnie Blob*—as a character, story, and game—along with my own personal investigation into generational trauma and the increased understanding of my identity as a third-generation holocaust survivor (G3), prompted an unexpected, though perhaps obvious, personal connection. As noted by Marc Tracy in their New York Times article “*The Holocaust’s Grandchildren Are Speaking Now*,” many third-generation Holocaust survivors feel a strong sense of responsibility to preserve and share their ancestors’ experience through written and cinematic expression. Upon engaging with this body of research, especially the 2022 recorded panel session “*Writing the Third Generation of Holocaust Survivors*,” I recognized parallels between *Bonnie's* story and my own family's history of apocalyptic survival of the Holocaust, indicating that perhaps *Bonnie* and her story are my own personal way of expressing and taking ownership of my position as a member of “G3.” This realization highlights the complex ways in which storytelling—even within an

educational and game-based context—can serve as a medium for collective memory preservation and the meaning-making that comes from artistic personal expression.

Conclusions and Implications

The continued success of the *Bonnie Blob* lesson and its related activities across such a large and diverse group of students suggests the significant potential for integrating digital games, puppets, and narratives to create highly engaging hybrid educational experiences. The observations suggest that the interplay of these elements fosters not only musical development, but perhaps more importantly, these experiences enhance student engagement, motivation, and social-emotional learning. Given the observed benefits, further research is necessary to fully understand the benefits of each part of complex mechanisms that make this approach effective and to refine the hybrid implementation of the process across this as well as more diverse educational content and settings.

In the specific context of music education, a key area for continued study is the role of digital games in facilitating music learning as well as its role in deliberate music play and deliberate music practice. (Lordo 2021). While this case study indicates that students absorbed musical concepts passively through gameplay, more quantitative research is needed to measure the extent of musical skill acquisition and retention over time. Controlled studies comparing traditional music instruction with passive embedded listening approach and deliberate game-based play approaches could provide valuable insights into the effectiveness and development of digital game-based music learning experiences. Additionally, more specific studies on embedding musical content into narratives could lead to a new, more immersive educational experience.

Importantly, the researchers' observations suggest that puppets serve as powerful tools for fostering socio-emotional development, helping students navigate emotions, build empathy, and engage in meaningful storytelling. Future research should examine how teachers can utilize puppets and tailor their interactions to contribute to these positive outcomes, as well as the long-term impact on students' communication skills and emotional intelligence. Another critical consideration is the professional development required for educators to effectively integrate puppets into their teaching to optimize the social-emotional benefits. Research regarding teacher training, best practices, and dramatic coaching will be essential in ensuring that puppetry remains an effective and accessible pedagogical tool in the digital age.

Finally, the sociological adaptations of the story as a result of real-time cultural experiences and the addition of the author's family ties indicate a full autoethnographic study may provide further insight to the lesson and its cultural influences, which could pave the way for the creation of future hybrid-learning experiences.

There is much potential in the continued study of this, expanding the field of game-based and arts-integrated learning. By deepening our understanding of the intersection between digital games, puppetry, storytelling, and education, educators can create evidence-based strategies to enhance student learning and engagement in diverse educational contexts.

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Mary Eleanora (Mary-Ellen) Fimbel is an accomplished educator, consultant, game designer, dedicated partner, and mother of two amazing children. Her work integrates music, media technology, and interactive learning, with a focus on innovative, project-based approaches. She is currently exploring serious game design and hybrid learning experiences. Mary-Ellen's research interests include game-based pedagogy, music, puppets, and learning through interactive media. Mary-Ellen currently teaches at Evelyn Scott School in Canberra, Australia and consults as the head of Ednovation for the NYsKOOL micros schools network across Europe and online.

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