

## CAPSTONE ACTION/LEARNING LOG

NAME: **Riya Kc** MY ESSENTIAL QUESTION: **How does music impact the mental health of students?** LOG #: 4 DATE: **Feb 2025**

HOURS SPENT WORKING ON YOUR PROJECT: **12**

MY PROCESS:

QUESTIONS/GOALS THAT I WILL EXPLORE BELOW THAT WILL HELP ME START ANSWERING MY ESSENTIAL QUESTION (SEE YOUR FURTHER QUESTIONS/GOALS FROM THE PREVIOUS LEARNING LOG):

1. How can I create a survey with relevant and engaging questions for students' connection to music?
2. What can I do to ensure that my survey reaches a diverse group of students?
3. What are the most common genres of music that students listen to when managing stress or anxiety?
4. What are the specific effects of lyrical versus instrumental music on student focus and productivity?
5. What are the most popular "study songs" among students?
6. Does music play a role in helping students cope with stress, and how?
7. Are there any noticeable trends between music preferences and mood improvement among the different grades?
8. How can the data collected through the survey be applied to promote mental health initiatives or create music-based resources for students?
9. Based on my research and survey results, how can I connect the benefits of music for mental health to practical strategies that schools or students can use in their daily lives?
10. What have you gotten out of each learning log leading up to this point

## RESOURCES I HAVE USED TO ANSWER THE QUESTION(S)

Must be properly cited. Sources could include: books, news articles, podcasts, artwork, people, songs/poetry, recorded conversations, films/documentaries, academic articles, stories, data. Use <https://www.citefast.com/> or <https://www.bibme.org/> for MLA, APA, or Chicago formats

### Works cited

Jei. (2018, November 8). *The effect of lyrical and instrumental music on reading comprehension tasks: Journal of Emerging Investigators*. The Effect of Lyrical and Instrumental Music on Reading Comprehension Tasks | Journal of Emerging Investigators.

<https://emerginginvestigators.org/articles/18-024>

Sloan, A., & Giuliana Conti, G. (2024, July 30). *5 ways music can improve student mental health*. 5 Ways Music Can Improve Student Mental Health.

<https://ascd.org/blogs/5-ways-music-can-improve-student-mental-health>

Souza, A. S., & Leal Barbosa, L. C. (2023, May 4). *Should we turn off the music? music with lyrics interferes with cognitive tasks*. Journal of cognition.

[https://pmc.ncbi.nlm.nih.gov/articles/PMC10162369/?utm\\_source](https://pmc.ncbi.nlm.nih.gov/articles/PMC10162369/?utm_source)

University of Pittsburgh. (n.d.). *Tips for Writing Good Survey Questions*.

<https://teaching.pitt.edu/resources/tips-for-writing-good-survey-questions/>

1)List individuals that have helped you since your last learning log and explain who they are and why you are consulting with them.

Since my last learning log my peers have been an essential part of finishing my project and helping me move forward. I reached out to a group of classmates who were also interested in music in my choir class to review the survey which I created before handing it out. Their feedback was very helpful, especially when it came to making sure the survey questions were clear and relatable to students. For example, one of my peers suggested adding a question about

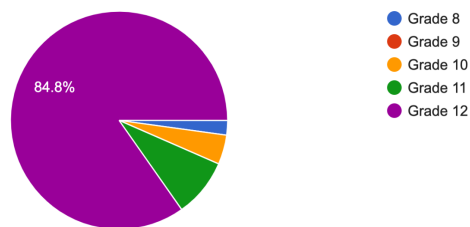
"study music" preferences, which helped me get more specific insights into how students use music for mental health management during schoolwork. They also recommended simplifying some of the wording to make sure the survey could be easily understood by everyone, regardless of their familiarity with the topic. The engagement from my peers was essential to ensure the survey was effective in gathering data. Their help played a major role in the survey's success and allowed me to reach a broader audience to get more accurate results.

## Survey and results

<https://docs.google.com/forms/d/e/1FAIpQLSduQq1fAQx6MZ1iv8uVCiPrvpv6xI-9PIbDrmNI6O2QJummYw/viewform?usp=preview>

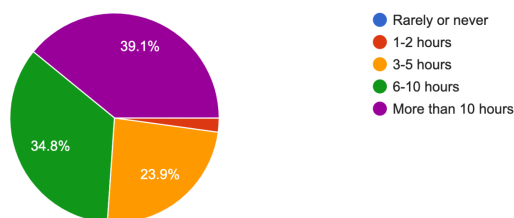
What grade are you in?

46 responses



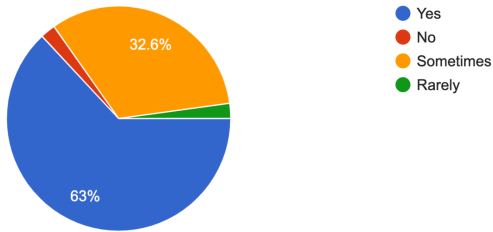
How often do you listen to music in a week?

46 responses



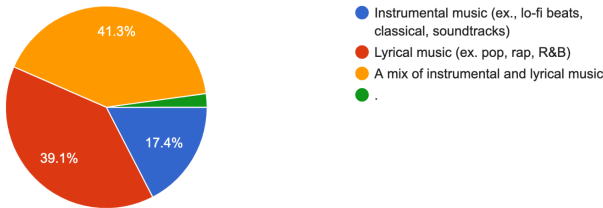
Do you listen to music to reduce stress or anxiety?

46 responses



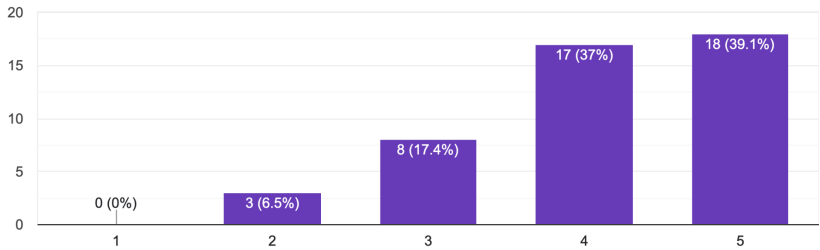
If yes, which type of music helps you focus the most?

46 responses



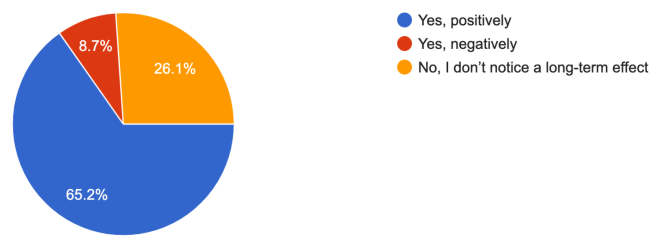
On a scale of 1–5, how effective do you think music is in helping you relax during stressful times (ex. tests, projects, deadlines)?

46 responses



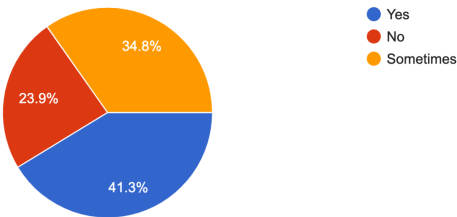
Do you think listening to music has a long-term effect on your mental health?

46 responses



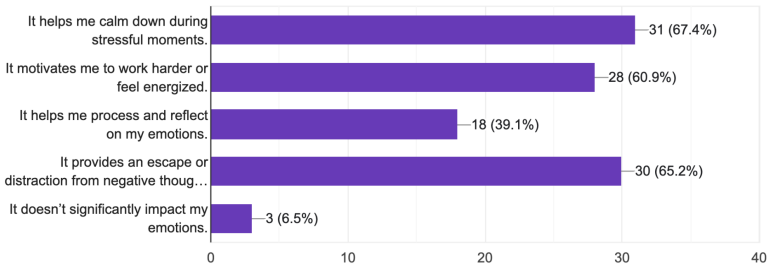
Do you use music to help you fall asleep or relax before bed?

46 responses



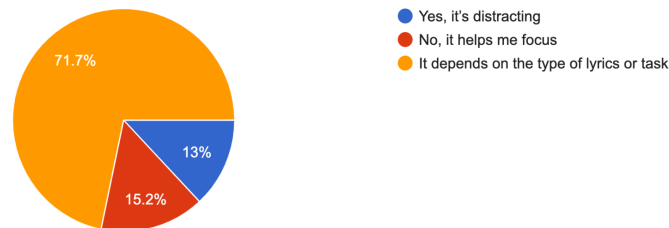
Which of the following best describes how music impacts your emotions?

46 responses



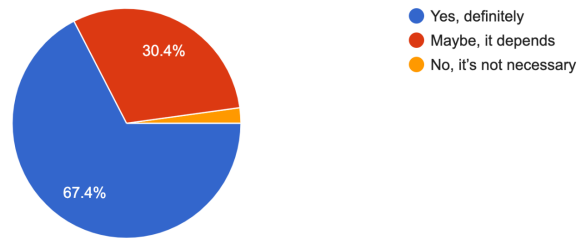
Do you find that music with lyrics distracts you when focusing on schoolwork?

46 responses



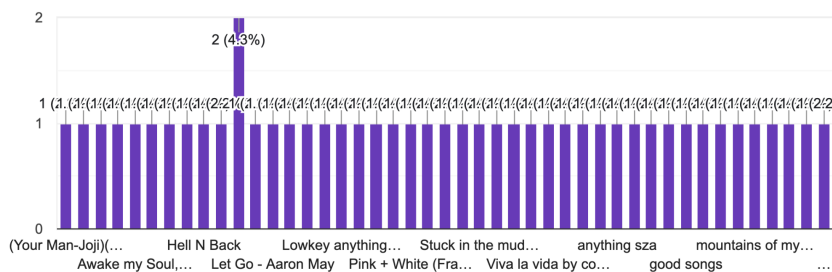
Do you think schools should incorporate music more into the day

46 responses



What are your go-to study songs (name 1-3)

46 responses



2) How have you addressed/incorporated the feedback from your teacher from the previous log?

WHAT HAVE I LEARNED SO FAR?

Synthesize what you've learned from your sources/experiences to SHOW your learning. This is NOT a summary; you need to describe where you learned it from and what you think about it to show critical thinking (INCLUDE QUOTES & CITATIONS).

Examples of critical thinking: analyze data, make inferences, examine, compare and contrast, consider different perspectives, make connections,

sketch, infer, modify, develop, and collaborate in this area...

Reporting on my LEARNING:

1) What have I learned so far? (REPORT ON THE QUESTIONS/GOALS FROM THE PAGE ABOVE)

1. How can I create a survey with relevant and engaging questions for students' connection to music?

To create engaging questions, I focused on the experiences and habits that students could easily relate to, such as their favorite genres, when they listen to music, and how it helps them

emotionally or academically. I kept the language simple and avoided making it feel like a formal or lengthy questionnaire. For example asking “What is your favorite study song?” allowed students to share something personal, while scale-based questions like “How often do you listen to music while studying?” captured more specific trends. This approach ensured that the survey was accessible and enjoyable while still gathering meaningful data.

## 2. What can I do to ensure that my survey reaches a diverse group of students?

To reach a diverse group, I shared the survey on Instagram, where my followers include peers from various grades and social groups. By using social media, I expanded the reach beyond my immediate circle of friends. Additionally, I asked others to share the survey to their friend group, ensuring more variety in responses. Posting on Instagram also made the survey accessible to students off and during school hours, allowing for more diverse and representative data.

## 3. What are the most common genres of music that students listen to when managing stress or anxiety?

Out of the 46 students who completed my survey, 41.3% said a mix of instrumental and lyrical music is the most helpful for managing stress or anxiety, while 39.1% preferred lyrical music alone, and 17.4% chose instrumental music. This aligns closely with existing research, which highlights the dual effectiveness of lyrical and instrumental music depending on individual preferences and tasks. According to a study published in *Frontiers in Psychology* (2021), lyrical music is often used for emotional regulation and connecting with lyrics during moments of stress, while instrumental music is favored for its calming and distraction-free nature, especially during cognitive activities. My results show how the two categories complement each other, with students often seeking lyrical music for emotional release and instrumental music for focus or relaxation. For example, research from *The Journal of Music Therapy* (2020) claims that instrumental music such as classical or lo-fi can help reduce cortisol levels, which are associated with stress. While, songs with lyrics usually those with relatable themes, can promote emotional comfort. My survey confirms how students combine these types of music, showing an adaptive approach to stress managing.

## 4. What are the specific effects of lyrical versus instrumental music on student focus and productivity?

The effects of lyrical versus instrumental music on student focus and productivity vary depending on the type of task and individual preferences. Research suggests that instrumental music is generally more effective for tasks that require deep concentration, such as reading, writing, or problem-solving. According to a study published in *Frontiers in Psychology*, “music with lyrics can interfere with verbal working memory,”(Frontiers in Psychology, p.4) meaning that students may struggle to process words while listening to songs with lyrics. Instrumental music, on the other hand, has been linked to improved focus and reduced stress, which can enhance cognitive performance. However, my survey results show that student preferences do

not always align with research findings. Out of 46 students, 41.3% reported that a mix of both lyrical and instrumental music helps them focus the most, while 39.1% preferred lyrical music and only 17.4% found instrumental music to be the most effective. This suggests that while instrumental music may reduce cognitive interference, lyrical music could provide motivation or emotional regulation that makes studying more engaging which was what the students who did my survey needed most. For example, some students might find that lyrics create a sense of familiarity and comfort, which can help them concentrate on assignments. Personally, I have noticed that instrumental music is helpful for reading and writing, but lyrical music keeps me engaged when working on repetitive tasks. This highlights how the effectiveness of different types of music depends on the nature of the task and individual learning styles.

#### 5. What are the most popular "study songs" among students

In this playlist I incorporated all the songs that students put into my survey as their study time favourites. The playlist is very mixed as there was a variety of students who put in their answers. It goes from mainstream artists like Drake and SZA to lofi beats and more underground country and rap artists. This highlights the diverse range of music that students find helpful for studying, emphasizing that music preferences for focus and productivity vary widely among individuals. The variety in genre choices suggests that students select music based on their personal study habits, emotional state, and the type of work they are doing

[https://open.spotify.com/playlist/1hEMoGYbVvpi3y9Fy5nJHH?si=yEr3bAuRSYe0u6cvoTdBG&pi=27xw4\\_BWRNuQi](https://open.spotify.com/playlist/1hEMoGYbVvpi3y9Fy5nJHH?si=yEr3bAuRSYe0u6cvoTdBG&pi=27xw4_BWRNuQi)

#### 6. Does music play a role in helping students cope with stress, and how?

Based on my research and experiences, music plays a significant role in helping students cope with stress. Studies state that music can influence mood, lower anxiety, and help students focus by affecting the brain's emotions. Music, whether instrumental or lyrical, can provide a mental escape or a grounding effect, allowing students to momentarily disconnect from the stresses of academic life. For example, research has shown that soothing instrumental music activates areas of the brain that promote relaxation, helping to lower cortisol levels, a hormone related to stress (Thoma et al., 2013). Similarly, lyrical music can provide emotional relief by allowing students to connect with the themes of the songs. Overall, music offers a personalized approach to managing stress, giving students an emotional outlet or a way to reset their focus and reduce anxiety before tackling academic tasks. This connection between music and stress management highlights the potential of music as a self-regulation tool, especially during high-pressure periods such as exams.

#### 7. Are there any noticeable trends between music preferences and mood improvement among the different grades?

From my research and the survey results there appear to be noticeable trends in how different grades use music to improve their mood. Younger students, particularly in



Grades 9 and 10, seem to prefer lyrical music for emotional release and relief. This could be because younger students may still be developing their coping mechanisms and are more likely to turn to music with lyrics they can relate to, helping them process emotions and stress. In contrast older students such as those in Grades 11 and 12, may lean more towards instrumental music, which is associated with improved focus and concentration. Research supports this, showing that instrumental music can enhance productivity and concentration by minimizing cognitive overload caused by lyrics. This suggests that as students grow older and develop stronger self-regulation skills, they may shift from seeking emotional comfort in lyrical music to using music for cognitive enhancement, reflecting how music can be adjusted to meet specific mood and productivity needs at different stages of development.

8. How can the data collected through the survey be applied to promote mental health initiatives or create music-based resources for students?

The data collected through the survey can be effectively used to inform mental health initiatives and create resources. Music-based initiatives could include activities like guided relaxation sessions that incorporate students' favorite songs or themes, which would not only promote mental wellness but also create a sense of community around shared musical interests. Schools can also create music therapy programs where students are encouraged to create their own playlists for stress management or emotional expression. These resources can be personalized, increasing their effectiveness in helping students manage stress, improve mood, and enhance their overall mental well-being.

9. Based on my research and survey results, how can I connect the benefits of music for mental health to practical strategies that schools or students can use in their daily lives?

From my research the benefits of music for mental health can be applied into practical strategies that students can easily incorporate into their daily routines. One effective approach could be integrating short music breaks into the school day. Listening to music can serve as a quick mental reset, helping students refocus and alleviate feelings of stress (Ascd, 2024). For example, students could be encouraged to listen to their favorite calming or instrumental tracks during study periods to improve concentration or during break times to de-stress. Also, more student-driven music programs such as a playlist sharing initiative, or workshops could help create a sense of a shared resource for emotional support. Since students in higher grades are more likely to use instrumental music to boost productivity, schools could also implement specific study time playlists that align with students' preferences, helping to create an environment based on concentration and mental well-being. These strategies include the therapeutic aspect of music and can enhance both individual and collective mental health outcomes. By integrating music more often into daily life, students can build a music based foundation for emotional regulation, stress relief, and academic success.

10. What have you gotten out of each learning log leading up to this point?

### **FROM LOG 1:**

Each learning log has helped me deepen my understanding of how music impacts student mental health while also refining my research skills and approach. In my first log, I focused on gathering foundational information about how music affects the brain, particularly its role in reducing stress and anxiety. I learned that music activates multiple brain regions responsible for emotion, memory, and focus, which explains its powerful effect on mental health. I also discovered that lowering cortisol levels through music can help manage stress, especially for students dealing with academic pressure. Consulting with my aunt, a forensic psychologist, gave me insight into how music therapy is used in a clinical setting, while my friend Persia's experience helped me understand how students actually use music in their daily lives for stress relief and concentration.

### **FROM LOG 2:**

In learning log 2 I gained valuable insights into how different music genres affect students' mental health and focus. Through discussions with my cousin and a friend from dance school, I learned that music preferences significantly impact emotional states. For example, lo-fi music helps my cousin concentrate by providing a steady rhythm without distractions, while my friend finds energetic rap music to be a great way to release stress. Research supported these personal experiences, showing that genres like classical music can help with relaxation and focus, while rock and heavy metal can either raise aggression or provide a cathartic release. This helped me better understand how students use music for emotional management and academic performance. I also improved my research process, focusing on citing sources accurately and directly addressing each of my guiding questions. Overall, Log 2 has strengthened my understanding of how music affects mental health.

### **FROM LOG 3:**

In learning log 3 I've learned a lot about how both instrumental and lyrical music affect students' mental health and focus. Through research and personal experiences I realized that instrumental music like classical or lo-fi help students stay calm and focused. The steady rhythms and lack of lyrics keep the brain from getting overwhelmed, which makes it easier to concentrate, especially during stressful times. My cousin Nicolas, who produces music, shared that he uses instrumental music to help him express emotions he can't put into words. On the other hand lyrical music connects with people on an emotional level helping students feel understood and supported especially when they're dealing with stress. For example, my friends often listen to artists like Billie Eilish when they're feeling anxious because the lyrics help them put their emotions into words. I also discovered that personal preference plays a huge role in how music affects mental health. Some students find instrumental music helps them relax and concentrate, while others prefer lyrical music because it motivates them or gives them a sense of connection. Research shows that music that matches a student's tastes is more likely to reduce stress and improve mood. I also learned that specific genres can have different effects. Classical and ambient music are great for relaxation, while upbeat lyrical songs can boost motivation. This has helped me understand that the right music, whether it's instrumental or

lyrical, can make a big difference in a student's mental health, depending on their personal preferences and emotional needs.

#### YOUR ESSENTIAL QUESTION:

In a paragraph, use your findings from above and from past learning logs to answer your Essential Question.

I chose the question, "How does music impact the mental health of students?" because music has always been an important part of my life, as it's a source that I can always rely on for embracing any mood I'm feeling. And it's a universal tool that helps students deal with emotional struggles and improve their focus and I wanted to dive deeper into how it specifically affects mental health and academic performance. I found that music is more than just a source of entertainment for students, it's an important emotional outlet and a tool for mental well-being. My research has shown that music plays a critical role in managing emotions, enhancing focus, and reducing stress, all of which impact students navigating the pressures of school life. Through the use of both lyrical and instrumental music, students can address their emotional needs in different ways, depending on what they are experiencing. My survey results highlighted how music serves different purposes based on age with younger students gravitating toward more lyrical music for emotional comfort and older students turning to instrumental music to improve concentration. This shift in musical preferences as students mature suggests that music plays a key role in emotional regulation and productivity. Music's connection to mental health is profound, it helps students manage anxiety, improve focus, and provide motivation.

#### WHAT HAVE I LEARNED SO FAR? WHAT HAVE I LEARNED SO FAR?

Reflect on the Capstone PROCESS that you have chosen (refer to the processes document). Think about HOW you have tried to answer the question. Describe what's working and what isn't working. (If unsure, copy & paste the bullets you've been working on from the processes document here, and reflect on each one)

Reflecting on the Capstone process so far, I've learned a lot about how to approach research, investigate a topic, and communicate my findings. I started with the essential question, "How does music impact the mental health of students?" because it combines my interests in psychology and music, and it's something I feel can really make a difference for students like myself. It's been motivating to work on a question that I'm passionate about and that connects to real-world issues.

#### Design an Essential Question

Choosing this question felt like the right direction since it was both personal and relevant to a lot of students. It's been great to have a clear focus that's specific enough to allow deep exploration

but broad enough to explore various angles. The question has helped guide my research and provided a basis for my project, which has kept me on track.

### **Plan and Investigate**

For my research, I used a combination of academic sources, people and a survey to gather information. The academic research helped me build a strong foundation of understanding, while the survey allowed me to connect the findings to my own school community. Getting student responses has been valuable, but it's been a bit challenging to get a wide range of data since only a limited number of people participated. I've learned that collecting data from a larger group could help me get a better, more accurate picture of how music affects students' mental health.

### **Analyze and Interpret Collected Information and Data**

The most interesting part of the project has been analyzing the data. I found that certain types of music, like instrumental pieces, were really good for helping students concentrate, while music with lyrics had a stronger impact on emotions. What's worked well so far is being able to see patterns in the data, and I think I can present these findings in a way that's clear and makes the information accessible to everyone.

### **Evaluate**

Looking at what worked, mixing academic research with a personal survey has helped me gather both general knowledge and specific data. However, one challenge has been making sure the questions in the survey were clear and unbiased, as some of the responses were a bit vague. Getting feedback from peers has helped me refine my approach and adjust my project to make it more understandable and focused. One area for improvement is to refine the survey questions more to avoid any confusion and get clearer data next time.

### **Report and Communicate**

For reporting and communicating, I've been working on my trifold poster, making sure the design is clear, engaging, and easy to follow. I'm also planning an interactive component to go along with the poster, like a playlist or an activity that helps show how music can impact emotions and mental health. I want to make sure that people who view the poster can engage with it in a hands-on way, so it's not just about reading the information but connecting with it. Overall, I'm proud of what I've accomplished with the research so far. While I'm happy with the data I've gathered. What's exciting is knowing that my findings can help students understand how music can be used to improve mental health and academic performance, which is something I'm passionate about.

How do you plan on showing all your learning at the Showcase?

I haven't fully decided what my interactive component will be however, I plan on making a quiz of matching genres to moods or giving a QR code for the playlist that was resulted from the survey. I also plan on organizing all the knowledge ive gained from my learning logs in a Trifold poster.

Reflecting on SELF à What am I learning about myself?  
How can I use this information about myself moving forward? (learning style, personality, skills, feelings, work ethics...)

This project has taught me a lot about myself, including the challenges of balancing school, work, and commitments. I've realized that while I'm capable of producing quality work, I tend to fall behind when I have too many responsibilities at once. Throughout this process, I struggled to stay on top of deadlines, and I handed in each learning log late. This wasn't due to a lack of effort or interest, but rather because I was juggling work, school assignments, and other obligations. I've observed that time management is an area I still need to work on. While I like having structured work habits, I've learned that structure alone isn't enough—I need to actively set deadlines for myself and hold myself accountable. Moving forward, I plan to improve by setting smaller goals for long-term projects so that I don't fall behind. Despite the challenges, I've also learned that I'm resilient. Even when I fell off track, I kept going and made sure to complete each log. This shows that I don't give up, even when things get overwhelming. Moving forward, I'll use this experience as motivation to develop better time management strategies so that I can keep up with future projects without feeling so rushed. I will apply this knowledge to refine my learning strategies in university by managing my workload more effectively, seeking out different perspectives, and continuously improving my problem-solving and research skills.

How has your sense of yourself as learner changed since your first learning log (go back and see your answer on LL#1)

Since my first learning log, my sense of myself as a learner has evolved in several ways. Initially I knew that I worked best with structured work habits, schedules, and breaking tasks into smaller steps but through this project I've also realized how important adaptability is. While I started with a strong research plan I encountered challenges such as finding studies that focused specifically on students rather than adults. This forced me to adjust my approach by looking into different types of sources, including firsthand perspectives and conversations with relevant sources. I've learned that while organization is important, being flexible and open to refining my research strategies is just as important for deeper learning. I've also become more aware of how I engage with information. My preference for reading and writing as a learning style has remained the same, but I've found that incorporating visual elements like watching videos about how music affects the brain has made complex concepts easier to grasp. This has shown me that even though I have a preferred learning style, combining different methods can strengthen my understanding. Additionally, this project has reinforced my ability to critically

analyze sources, questioning gaps in research, and considering multiple perspectives rather than just summarizing information.

What skills or aspects of yourself will you want to highlight at the Showcase?

I've learned a lot from my research and all of my learning logs therefore at the showcase, I want to highlight my ability to conduct in-depth research and make meaningful connections between academic studies and student experiences. I also want to showcase my skills in organizing complex information, presenting it in a clear and engaging way, and demonstrating how music can be integrated into school environments to support mental health. Most importantly, I want to emphasize my growth as a learner and how I've developed stronger adaptability, problem-solving skills, and critical thinking through this process.

NEXT STEPS: (E.G. Create my next piece of artwork using feedback from my peers.) (E.G. Read and take notes on 2 articles about X, Y, Z.) ON WHAT DATE WILL I COMPLETE THIS WORK: October 15th during PLT day November 15th after school