Student Research Submissions

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Writing to Rhythm: A Qualitative Comparative Analysis Exploring The Effects of Orchestral vs. Electronic Music on Third Graders' On-Task Performance during Creative Writing

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Graders' On-Task Performance During Creative Writing

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Abstract

This paper was a research assignment for the purpose of a masters' degree requirement through the University of Mary Washington's College of Education. The graduate author both designed and implemented the research in her internship-placement classroom. The present research paper is a qualitative comparative study exploring the effects of two different types of easy-listening music—orchestral and instrumental—on the on-task performance of 23 third-graders during creative writing. The research took place over the course of three weeks, in which students received three different treatments (one each week) in which they had fifteen minutes to complete a pre-determined writing prompt. The first week was the control, or silent treatment. Week two was the first experimental treatment—the orchestral music—followed by final week with electronic music. Using three tools of qualitative measurement: student surveys, observation notes, and composition analysis, the researcher concluded that the data was highly illustrative of individual preference with regard to background music promoting on-task performance. There was not just one treatment that proved favorable or unfavorable to the majority of participants.

Keywords: Music, task performance, elementary, creative writing, background music, easy-listening music, orchestral, electronic, literacy instruction

Introduction

Often times, it is the integration of creativity that educators embody, which ultimately leads to favorable results in the classroom. Using innovative strategies and tools during instruction can result in an entirely transformed learning setting. For instance, the use of music, an innate stimulant to the human brain (Weinberger, 2004), can be implemented in different activities during the school day to enhance important learning catalysts, like cognitive engagement, and increased motivation and attentional space. Previous research relies heavily on classical music when assessing the impact of using music in the classroom; however, there is very little research existing that explores other genres of music to engage students.

The purpose of this study is to answer the following research question: *How do different kinds of easy-listening music affect third graders' on-task performance during creative writing?* As sole researcher, it is my hope that by imposing three different auditory conditions on participants during the creative writing process, I will be able to best determine what the majority of students in my particular classroom respond best to in terms of task performance. For purposes of the present study, task performance refers specifically to the effectiveness at which a job is completed, in terms of focus and efficiency.

Literature Review

Music and the Brain

There is extensive research done which explores how music affects the human brain. Music stimulates the brain in a variety of ways, at all ages. In fact, Weinberger (2004) states that humans are born with an innate appreciation for music. Babies at age two months old will respond to different types of music. On that same note, the Mozart effect is a hot topic in

research. Scientists have found exposure to classical music to prenatal infants can produce favorable cognitive results—such as spatial-reasoning intelligence—in later development (Campbell, 2001).

Perez (2010) suggests that responses to music, are "based on pre-wired connections particularly related to the 'primitive' elements of music, for example, loudness, timbre, pitch and tempo." More specifically, it's scientifically known that music is processed in the right side— the creative side—of the brain and speech is processed in the left side. Ultimately, music engages the creative side of our brains (DiEdwardo, 2005).

Music in the Classroom

The idea of integrating music in the education setting is not a new one. Previous research shows that background music in the classroom improves cognitive processing (DiEdwardo, 2005). Music can improve both the attitude toward and the quality of writing when exposed to calming music (Legutko & Trissler, 2012); Legutko & Trissler (2012) also found that music can help improve the writing performance of students with learning disabilities, emotional disabilities, and behavioral disorders. Additionally, integrating music in the college setting has been conducive to creating thesis statements for research papers, improving students' grades, and promoting out-of-the-box thinking, as pairing music with linguistic activities forms a connection between the two different intelligences (DiEdwardo, 2005). DiEdwardo (2005) says, "pairing two intelligences advances student potential" and background music has a serious potential to heighten self-efficacy in learners, and ultimately, more successful learning and achievement.

In the study done by Legutko & Trissler (2012), the researchers site old literature by O'Bruba (1987) that demonstrates because of the similar symbol structure present in both music and written-language, music can be effective in supporting the use of reading programs for early

readers. For instance, the left-to-right structure and "visual and auditory discrimination" are both unique to the world of music and language.

Davidson & Powell (2001) suggest that background music can be used in any classroom setting. In other words, music does not have any greater impact on students based on the specific subject matter being taught. The researchers ultimately stated "it would seem that providing easy-listening background music in the classroom would be a plausible, yet inexpensive technique for increasing the amount of time in which students are actively engaged in learning" (Davidson & Powell, 2001).

The Effect of Different Types of Music on Task Performance

Past research explores the differing effect of music based on the genre. Melody, rhythm, harmony, and timbre are all aspects of music that have shown to have a direct effect on cognitive processing (Weinberger, 2004). Hallam & Godwin (2015) suggest that listening to "complex, arousal-evoking music" has been shown to diminish the ability of students to exert attention and concentration when working in the academic setting. Furthermore, Hallam & Godwin (2015) determined that loud and fast music disrupts reading comprehension, which means— potentially—lower reading engagement. In her research, DiEdwardo (2005) discusses the work of Don Campbell, specifically his book on The Mozart Effect, which suggests that classical music can enhance students' learning by stimulating higher cognitive processing.

Based on previous research, the type of music being used—whether it's calming or arousing—seems to have a direct effect on the attentional space of students in the classroom setting. According to Davidson & Powell (2001), easy-listening background music had a positive effect on the on-task behavior of fifth-grade students during science instruction. Whereas, in another study, music that was distinguished as arousing was found to decrease the

attention span in learners—in fact, exciting music hindered students' ability to focus and

ultimately led to greater levels of distractibility (Davidson & Powell, 2001). Alternatively, some

students with learning disabilities experienced more distraction when music was not present

(Legutko & Trissler, 2012).

In their study, Hallam & Godwin's (2015) purpose was to not only to explore the

different effects of calming and arousing music, but also to observe how background music

specifically influences task performance.

When measuring task performance—and extremely subjective and relative concept—

Researchers must determine an observable and objective way of accurately measuring it.

Legutko & Trissler (2012) introduce a past study done by Donohoe & McNeel (1999), which

measured task performance of writers based on the word-volume of their compositions. The

present study uses this aspect as one criterion of qualitative data collection (see methodology).

In their own study, the researchers observed their participants responded extremely well to

music—as they reported they were more easily able to ignore distractions present during

instruction. Additionally, the quantity of their writing increased with regard to their writing

compositions. According to surveys assessing the participants' perceptions of the music, the

control treatment (no music) made the writing task seemed more tedious and boring.

Students' Perception of Music Exposure

In the study by Hallam & Godwin (2015), the researchers concluded that the actual

results of music conditions often differed when compared to the perceptions of the student's with

regard to their on-task performance. For instance, when asked about the exciting music, some

students responded positively, saying the music made them feel "like dancing, happy, good,

relaxed, excited, finishing the work quicker;" and when exposed to calming music, many

students described negative effects they experienced from the music, including making them

"make mistakes, wanted to talk, bored, and scared." The actual results of the study indicated the

precise opposite—the exciting music produced negative outcome on researchers' measurement

of task performance; whereas, the calming music produced favorable results in the learning

process. The researchers observed that participants exposed to calming music became engaged

in the task much more quickly than when exposed to exciting music. Furthermore, participants'

demonstrated negative behavior when exposed to exciting music. They were not as quiet or as

focused as students' listening to the calming music.

Summary and Implications

From studying previous research, I can conclude that music certainly has an effect on the

task performance in students. The question remains: what is the ideal type of music to use as

background noise during instruction? Additionally, what if two different types of calming, or

easy-listening music selections are used as experimental variables? Assuming that calming

music does, in fact, have a more positive impact on the task performance of learners, the present

study aims to determine whether orchestral or electronic (both categorized as easy-listening)

music has more favorable effects on the on-task performance of third graders.

When measuring task performance, it is critical to use qualitative data. Specifically,

participant surveys and observations from the researcher, have both been shown to produce

accurate and valid data analyses in previous studies concerned with similar subjects. The present

study is an attempt to build from past research on integrating music in the classroom. More

explicitly, it hopes to introduce new insight to educators with regard to exactly what type of

music is best to use with their students.

Methodology

Participants

Participants of this study were 15 third graders in a single classroom at a rural public elementary school in Virginia. The demographic makeup of this sample included 2 African Americans, 1 Hispanics, and 12 Caucasians. Exceptionalities included 6 SCOPE (gifted) students, 1 student with a speech IEP, and 1 student with a BIP/FBA for emotional disabilities. On the school level, as a whole, demographic makeup was 82% White, 11% Black, 4% Hispanic, and 2% Asian. 20% of the 800 students receive free or reduced lunch. 8% are gifted learners.

Procedures

During preparation, I selected four pieces of orchestral music and four pieces of electronic music that all fit the criteria of easy-listening music. I found each of these songs in my own playlist on Spotify, online streaming software that I pay a monthly fee for personal usage. Easy-listening music is defined as "any type of music which has a melodic melody line over dissonant chordal structures and is nonpercussive in beat. The orchestration is traditional in that there is a rich use of strings and winds" (Davidson & Powell, 2001).

In addition to selecting the music, I prepared two bags of writing prompt subjects. The first bag contained three common animal characters: dog, cat, and squirrel. The second bag contained three super powers: invisibility, flight, and the ability to read minds. Prior to each of the three scheduled writing prompts, I selected a student volunteer to select both an animal and a super power out of the bag. The entire class then had to write a creative story about that animal with that super power. I disposed whatever the volunteers drew from the bag, so by the third week, there was only one combination left.

In February, the actual research process began. Upon receiving approval from the Institutional Review Board (IRB), as well as receiving consent from my mentor teacher (Appendix A) and parental consent and student assent (Appendix B & C) the research took place over the course of three weeks.

During week one, students received no treatment; therefore the audio condition was silent. I selected one volunteer to select an animal character out of one bag and a superpower out of another bag. I then announced the character and the superpower and gave the class a verbal cue: ""*You have fifteen minutes to complete this writing prompt. Write about a (insert animal character) with (insert super power) super power. Please try your hardest, and work quietly at your seats.*"

During week two, students received the orchestral music condition. The same procedures occurred from week one, however I added one additional statement to the verbal cue: ""*I will be playing soft music in the background.*" Week three was exactly the same, but with electronic music.

Data Collection

Along the course of the three-week study, I collected data—entirely qualitative— through student surveys (1 per student, each week), observation notes (1 per student, each week), and comparative analyses of the 3 student compositions (for each student) following the conclusion of the research study.

I created the surveys (Appendix D) in order to collect self-assessment data from each participant's perception of how his or her focus was affected by the music. According to Hallam & Godwin (2004), students' perception of their on- or off-task performance is a critical "indicator of their ability to apply metacognitive skills."   Secondly, the classroom teacher and I

completed observation check-sheets (Appendix E) for each student on all three weeks. We did this in order to identify and record visual indications of on- or off-task behavior during writing. Lastly, I compared each student on an individual level based on the three different compositions. I created a rubric (Appendix F) based on three things: word-volume, staying on topic, and exaggerated marks (i.e. eraser marks, large punctuation marks, doodles). I completed a rubric for each composition in order to be able to quickly compare the students' task performance.

It was through these three tools of qualitative assessments that I was able to report measureable, observable, and objective data witnessed during the extent of my research study.

Results

Following my research, I organized the data into three qualitative categories: observations, student surveys, and composition analysis. In order to analyze task performance, it was important to equally assess task performance based on behaviors, students' perceptions, and quality of compositions. Below are the results from each treatment of the study.

Observations

Amount of time spent writing

In each of the three different treatments, both the researcher and supervising teacher marked down that 11 students were writing "most of the time" and 4 students were writing "some of the time" within the allotted fifteen minutes. Student E was the only one who was consistent in writing "some of the time," whereas, it appeared students A, B, H, I, and J were affected based on the different music treatments.
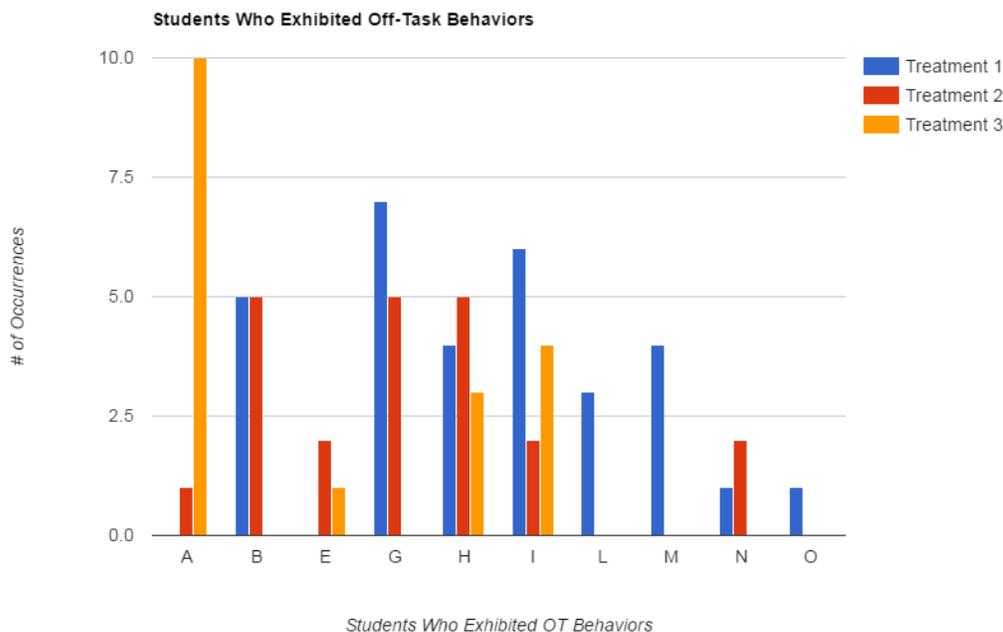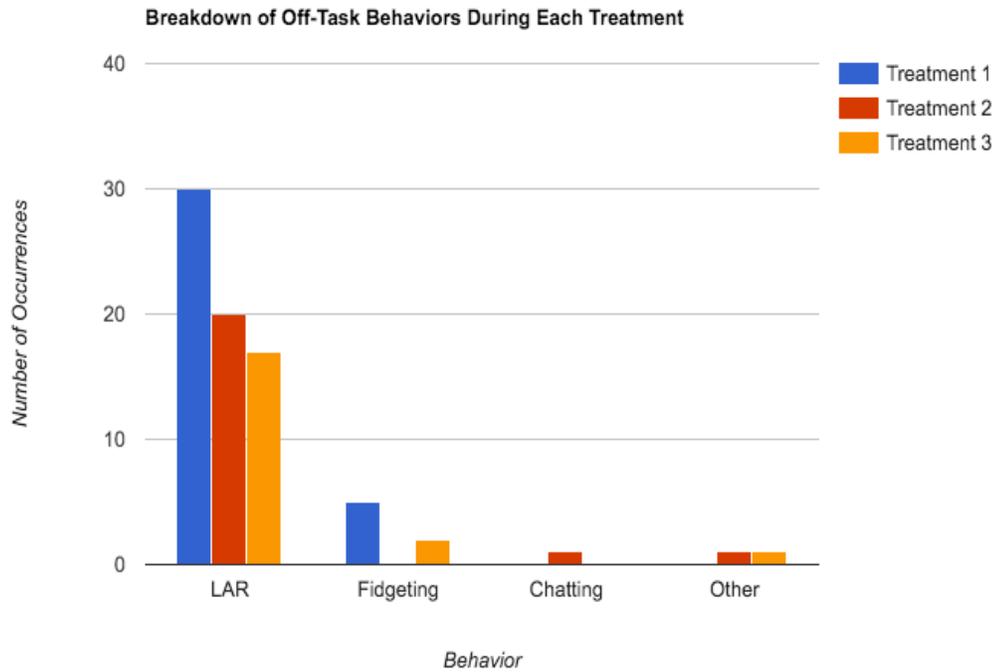
Observed on/off-task behaviors

During Treatment 1, there were 8 students (B, G, H, I, L, M, N, O) reported for exhibiting off-task behaviors during the writing time. These behaviors included looking around the room, fidgeting, chatting with peers, and others.

During Treatment 2, there were 7 students (A, B, E, G, H, I, N) who exhibited the same off-task behaviors. (It is important to note that there were not all the same 7 students from treatment one.)

During Treatment 3, there were only 4 students (A, E, H, I) who were marked for off-task behaviors.

Below are two graphs. The first shows the students who were observed as exhibited off-task behaviors. The second is a graph breaking down the specific accounts of off-task behavior for each treatment. *Note: LAR stands for "Looking around room."*


Students Who Exhibited Off-Task Behaviors

Breakdown of Off-Task Behaviors During Each Treatment

Number of Occurrences vs _Behavior_ (LAR, Fidgeting, Chatting, Other) for Treatment 1, Treatment 2, Treatment 3.

 Student Surveys *(Treatment 1's Survey only included the first 2 questions)*

Students' Perceptions of Focus Level

  Following Treatment 1, 11 out of 15 students reported feeling "focused" during the writing time. 2 reported feeling "distracted," and the remaining 2 said, "neither" focused, nor distracted. These numbers decreased in focused following Treatment 2 (orchestral music), as 8 out of the 15 students reported felt "focused;' 5 said "distracted," and 2 said "neither." After Treatment 3 (electronic music), only 5 students reported feeling "focused." 6 said they were "distracted," and 4 said "neither."

Question 1- How Did You Feel When Writing?
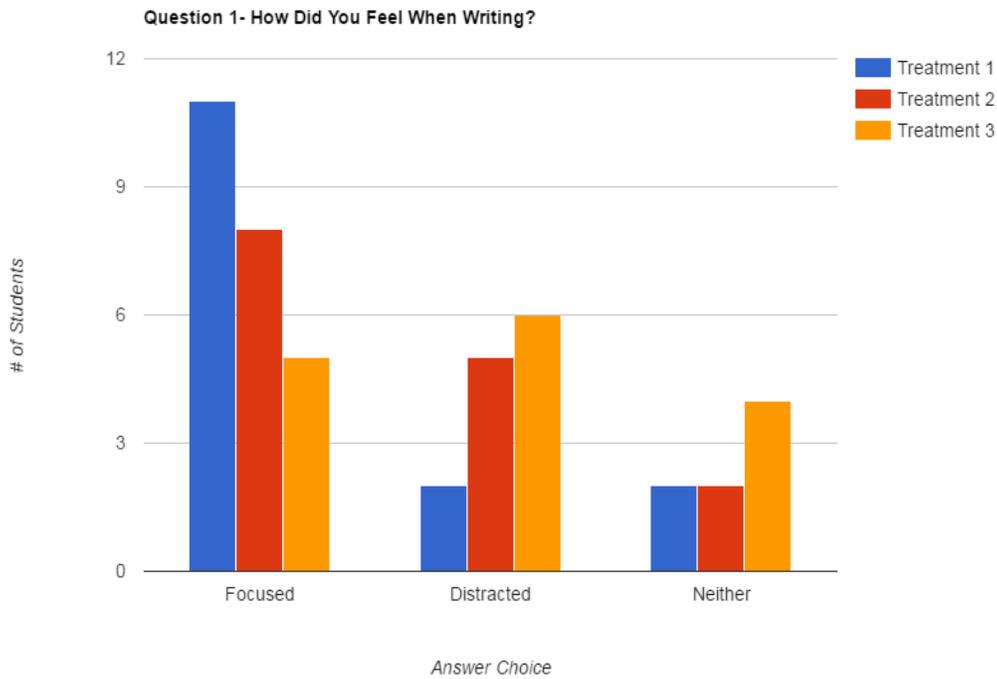
*Preference of Audio Stimulus During Writing*

In the survey following Treatment 1, when asked if they preferred quiet or music when writing, 10 out of the 15 participants reported that they prefer a quiet environment. 4 students preferred music, and 1 was unsure. This drastically changed following Treatment 2. Surveys showed that only 3 participants preferred silence over music when writing. 8 reported they prefer music, and 4 were unsure. After Treatment 3, only 3 students reported preferring silence. 7 reported preferring music, and 5 were still unsure. Interestingly, it appeared while students seemed to become more distracted each treatment, they interestingly began liking music while writing with each subsequent treatment.

Question 2 - I Write Best With...
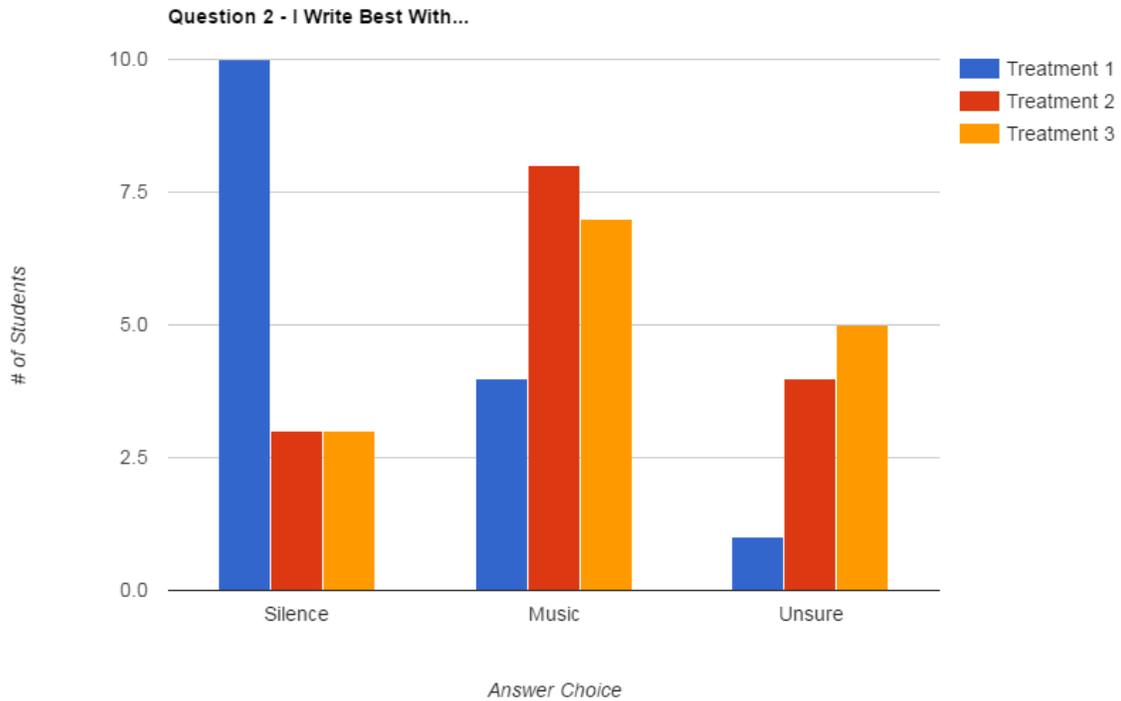
*Students' Opinions of the Different Music Genres*

When asked to categorize the music as "relaxing," "energetic," or "other," students' opinions changed with each treatment. After Treatment 2, 9 students classified the music as relaxing. Only 1 student thought the orchestral music was energizing. 5 students selected "other" and generated their own adjective. Their descriptions included *distracting, peaceful,* and *annoying.*

After Treatment 3, students' opinions of the music were very similar. 7 students found the electronic music to be relaxing. 2 thought the music was energizing, and 6 said "other," using words such as *disturbing, good, annoying, funny.*

Question 3 - I Thought the Music Was...
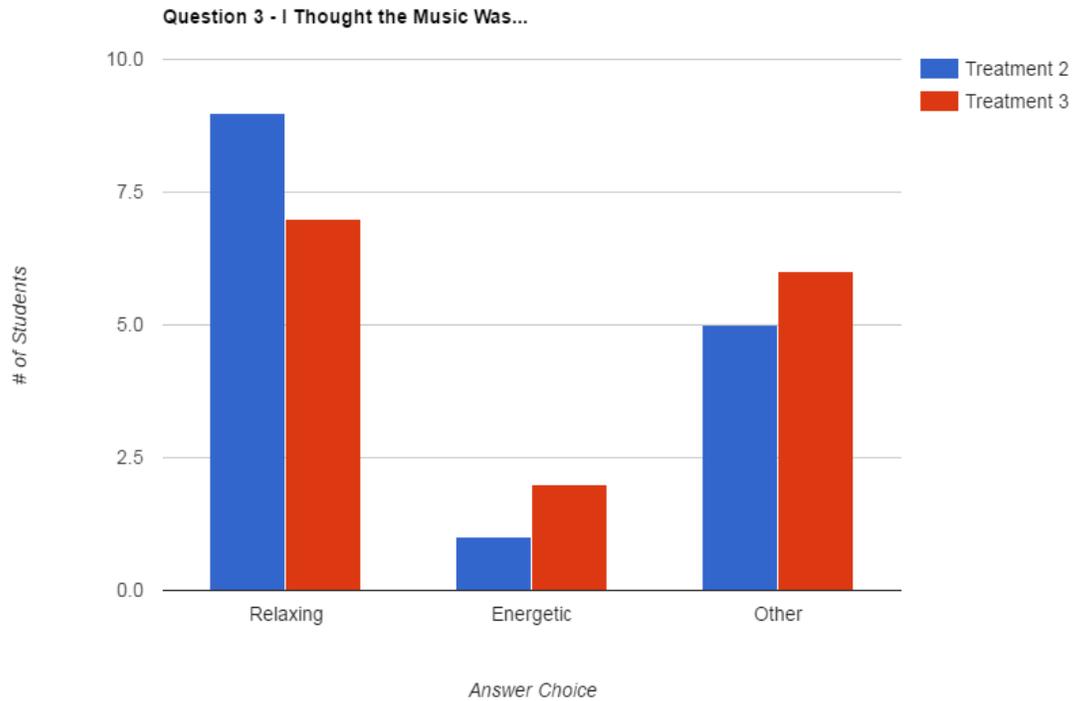
Did Students Notice the Music While They Wrote?

       Question #4 of the survey asked students if they noticed the music *the whole time they were writing, some of the time they were writing, or not at all.* This was important to assess in order to see if the students could have been distracted by merely noticing of the music. 12 students noticed the orchestral music *the whole time,* and 3 noticed it some of the time. 14 students noticed the electronic music *the whole time*, and 1 *didn't notice it at all.*

Question 4- I Noticed the Music...
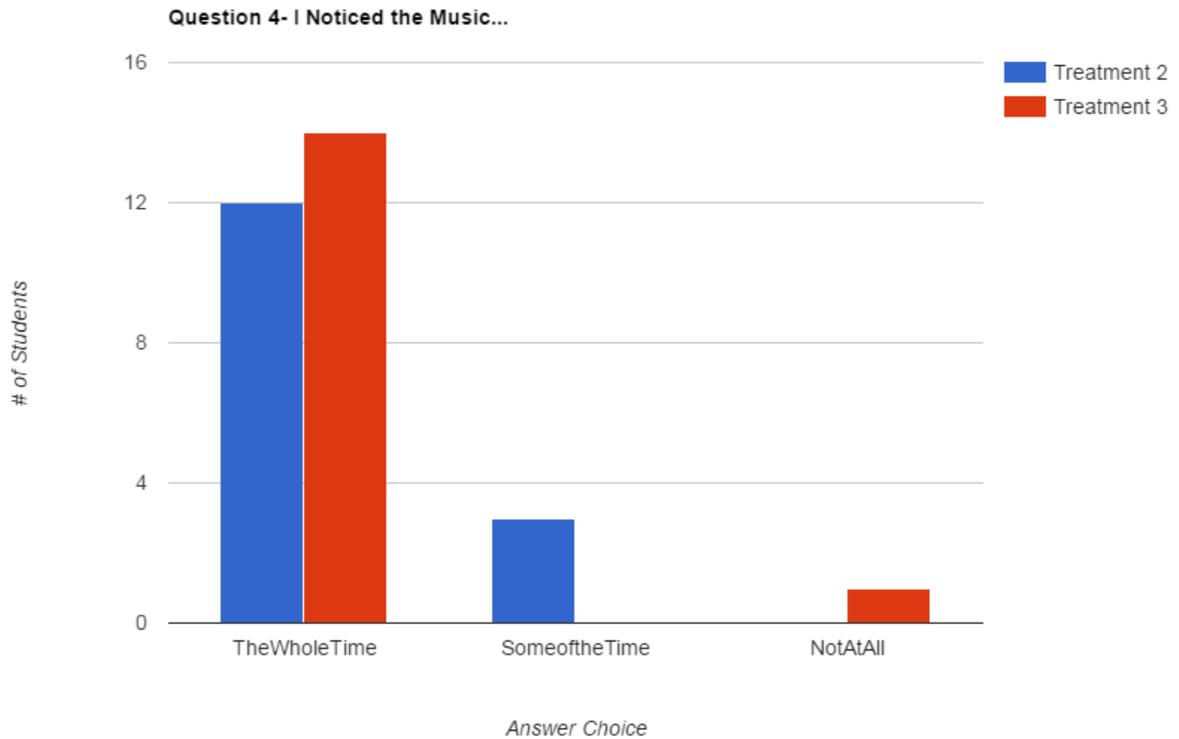
Would Students Choose to Listen to Type of Music Again?

The last question of the survey for Treatments 1 & 2 asked students whether or not they would listen to the music again while writing. They could select *yes, no,* or *I'm not sure.* Their answers indicated the students' general like or dislike for the specific music genres.

After Treatment 2, 6 students said they would listen to orchestral music again while writing. 8 students said they would not listen again, and 1 student was unsure.

After Treatment 3, 7 students said they would listen to the electronic music again while writing. 6 students said they would not listen again, and 2 students were unsure.
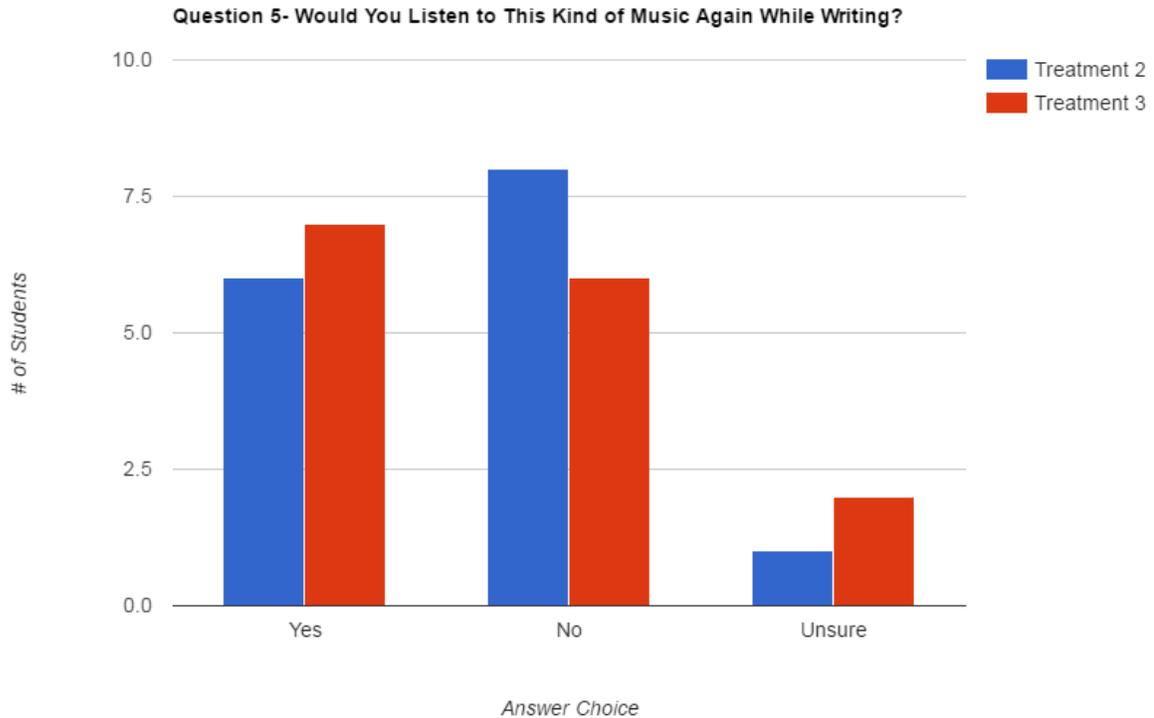
Composition Analysis

Composition analysis was the last form of data collection in this study. Students completed one composition for each treatment, so I had a total of three compositions per student to analyze and compare. When analyzing the compositions, I took two things into consideration: the number of lines the student wrote, and any written signs of off-task behavior (doodles/scribbles/bolded words, etc).

Length

Treatment 1 produced the longest compositions overall, and Treatment 3 produced the shortest compositions overall. See the graph below for the specific numbers.
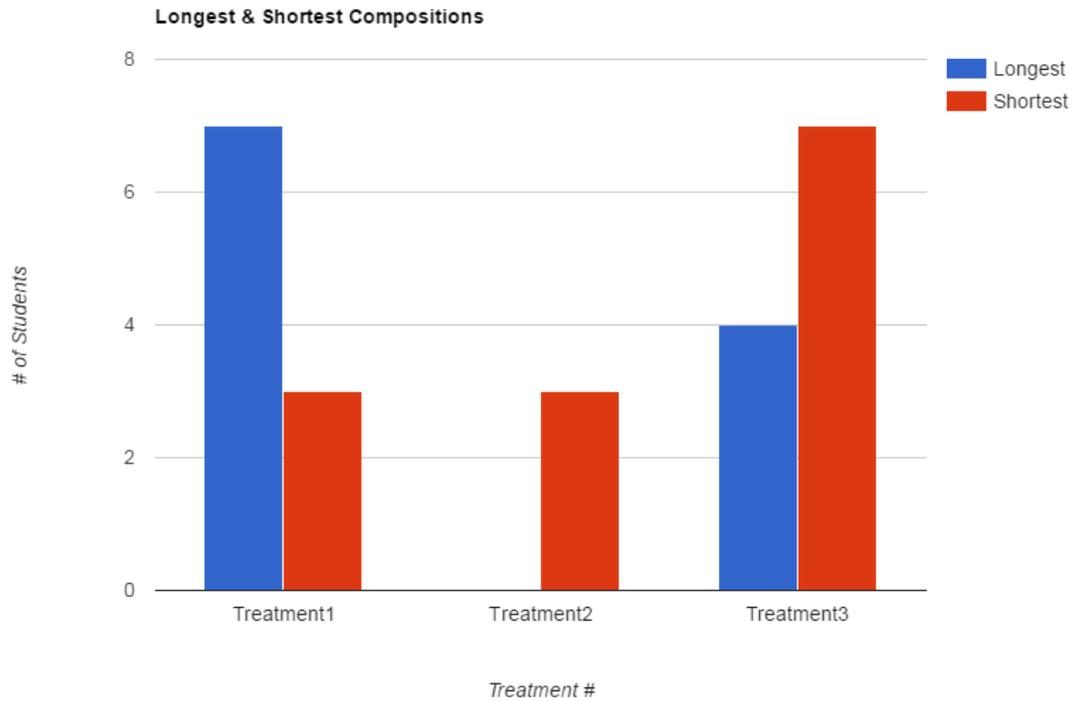
Written Signs of Being Off-Task

In Treatment 1, there was 1 composition with signs of an off-task student. This student spaced her words in a very abnormal way, as if her sentences were in columns. In Treatment 2, there were 4 cases of written signs of being off-task. These signs included changes in handwriting, scribbles, and strange spacing/margins. There were 5 occurrences in Treatment 3. These signs included the same signs from Treatment 2, and in addition, circling/bolding of words. Below, is a breakdown of the specific number of occurrences for each off-task sign present for each treatment.

Compositions with Typographical Signs of Off-Task Performance
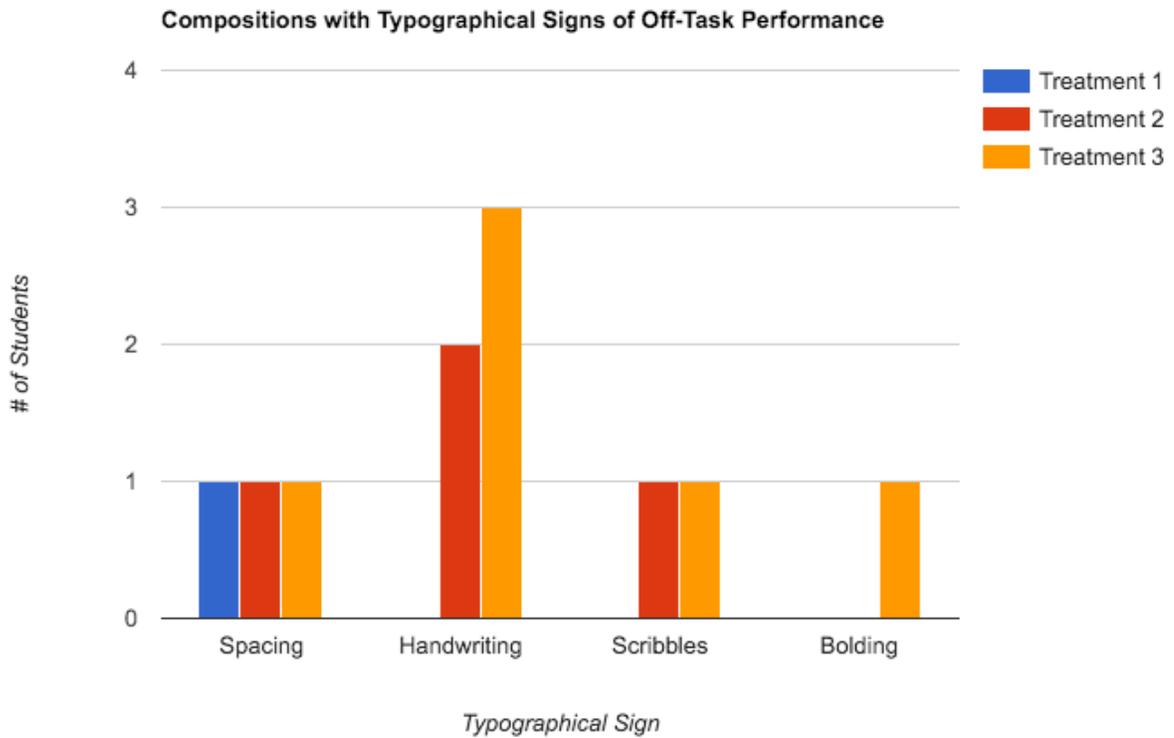
Discussion

Student Surveys

Overall, the surveys indicated that students were most on-task during Treatment 1. 11 out of the 15 participants reported feeling "focused" during T1; whereas, only 7 felt focused in Treatment 2, and 5 in Treatment 3.

I found it interesting that students' perceptions of their preferred writing environment (musical or silent) changed in favor of music, as the music treatments began. However, it was also interesting that as the music treatments began, and students reported preferring music over silence while writing, they also reported feeling less focused as the music treatments began.

Observation Notes

Observers reported students for demonstrating off-task behaviors most frequently in Treatment 1. This is interesting, since students felt most focused during Treatment 1. Students felt the least focused in Treatment 3, but exhibited the least off-task behaviors.

Composition Analysis

The students' compositions, like the surveys, suggest students were most on-task during Treatment 1. This is because Treatment 1 produced the longest compositions overall. Treatment 3 produced the shortest compositions, overall. For the purpose of analyzing data, I decided the length of composition had a positive correlation to on-task performance. For, if a student writes a lot, he or she was probably very focused and engaged while writing.

<div align="center">

Limitations

</div>

There were several limitations to this study. First, 15 participants make for an extremely small sample size. I also felt that the research could have benefited from students experiencing each treatment more than just one time. This would have been a good study to do over a long period of time, possibly even over the course of an entire school year.

Additionally, students' opinions about the music genres could have affected the way they answered the survey questions. Positive opinions about the music could have made their answers more favorable toward the study, whereas negative opinions of the music could have made their answers less favorable toward the study.

The last limitation is that students could have become more skilled at writing short stories about animals with super powers as each subsequent treatment occurred. Alternatively, the repetitive essay prompts could have been tedious, and therefore, students could have become

bored and less engaged. This could have been the reason for the shorter compositions in

Treatment 3.

Conclusion

The data from this study was all over the board. The student surveys and composition

analyses suggest students responded best to Treatment 1 in terms of on-task performance. The

observation notes, which were highly accurate in reporting any physical signs of off-task

performance, suggest Treatment 3 promoted the most on-task performance and Treatment 1 was

the least favorable condition.

The variety of results is highly illustrative of individual preference. From this study,

research concludes it is entirely dependent on the unique student whether or not musical stimulus

is beneficial or detrimental to promoting on-task performance.

Further research could be done to determine the most accurate form of data collection in

indicating task performance. For instance, are students' perceptions more accurate than their

physical signs of task performance, or more accurate than an analysis of their compositions?

This kind of research would be helpful in weighing the specific data from this study.

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Appendix A

Mentor Teacher Consent Letter

Dear Mrs. Stockli,

As you know, one of my requirements for degree completion for my Masters in Elementary Education at the University of Mary Washington is to conduct a research project throughout my student teaching internship. I am asking you to participate in the research. I am now going to explain the study to you.

I am interested in learning about two different types of music—orchestral and electronic—affect the on-task performance of third graders. On-task performance is the ability to focus on the task at hand with minimal susceptibility to becoming distracted or bored. For three weeks, I will be conducting this research by taking observation notes while students write their compositions, conductive surveys of students about their writing, and analyzing their compositions according to the rubric. As a participant in this research, I am asking that you assist me in making observations and analyzing compositions. After this task, I will interview you to ask questions about your interpretation of this data. I will take handwritten notes of your responses.

Your responses will be kept confidential. Your name and other identifying information will not appear in any papers in the project. Following the project, all samples I collect will be destroyed. Your participation in the study is voluntary, and you have the right to deny permission to participate in it. *The benefit of this research is that you will be helping me understand the influence of orchestral and electronic music on students' on-task performance during creative writing.*

If you have any questions or concerns, please do not hesitate to contact my University Supervisor Dr. Nancy Guth (nancyguth@comcast.net) or myself (sallen5@mail.umw.edu). I look forward to working with you in your classroom!

The research described above has been approved by the University of Mary Washington IRB which is a committee responsible for ensuring that research is being conducted safely and that risks to participants are minimized. For information about the review of this research, contact the IRB chair, Dr. Jo Tyler at jtyler@umw.edu

Thank you,

Sydney Allen

I, _____ have read the above letter and agree to participate in this project.

_____   _____

(Signature)   (Date)

I, _____ agree to keep all survey data collected from

_____ confidential.

_____   _____
(Researcher Signature)   (Date)

Appendix B

Parental Consent Form

Dear Parent or Guardian,

Hello, my name is Sydney Allen, and I am a student teacher in your child's classroom. I am currently a graduate student at the University of Mary Washington working towards my Masters in Elementary Education. A requirement of our program is to conduct an action research study in an area related to our studies. *I am inviting your child to participate in a research study I am doing. Involvement in the study is voluntary, so you may choose to have your child participate or not. I am now going to explain the study to you.*

I am interested in learning about two different types of music (with no lyrics)—orchestral and electronic—affect the on-task performance of third graders. On-task performance is the ability to focus on the task at hand with minimal susceptibility to becoming distracted or bored. For three weeks, I plan on implementing three different auditory conditions during students' engagement with creative writing. *. I am requesting permission to 1) give your child a survey to complete about his or her feelings, 2) collect their writing samples for observations, 3) observe their on or off-task performance during the writing sessions.* **This project will be part of your child's work for class. It will in no way require extra work for him or her.**

Your child's work will be kept confidential. His or her name will not appear in any papers in the project. All names will be changed to protect his or her privacy. Students will receive copies of their writing samples back when the research is complete and I will destroy any other data remaining in my possession at that time. This project will not affect your child's grade in any way. His or her participation in the study is voluntary, and you have the right to keep your child out of the study. Also, your child is free to stop participating in the study at any time. Your child would still participate in the classroom project, but data for the research study would not be collected from him or her.

The benefit of this research is that you will be helping me understand the influence of orchestral vs. electronic music the the on-task performance of third graders, and whether music or silence is more effective in promoting on-task behaviors. *There are no risks to the students other than risks posed on a normal school day.*

If you have any further questions or concerns, please do not hesitate to contact my university supervisor, Dr. Nancy Guth (nancyguth@comcast.net), myself (sallen5@mail.umw.edu). The research described above has been approved by the University of Mary Washington IRB which is a committee responsible for ensuring that research is being conducted safely and that risks to participants are minimized. For information about the review of this research, contact the IRB chair, Dr. Jo Tyler at jtyler@umw.edu

Please return this form by February 5, 2016. I look forward to working with you and your student!

Thank you,

Sydney Allen

I have read the above letter and give my child, _____, permission to participate in this project.

_____   _____
(Parent/Guardian Signature)   (Date)

I, _____ agree to keep all information and data collected during this research project confidential.

_____   _____
(Researcher Signature)   (Date)

Appendix C

Form of Assent (for each participant)

Dear Student,

I am very excited to be your student teacher throughout the spring! For part of our writing unit, we will be doing some creative writing where you get to write silly or exciting stories. You all will write three different short stories about an assigned character and a super power.

While you complete the writing prompts, I will be collecting information for a research project that I am doing to see how two different kinds of music affect you while you write your stories. The only thing you will have to do besides write is to fill out a short survey on how the music made you feel. While you are writing, I will watch to see what you do.

Your parents were given a letter about taking part in this study. If your parents did not allow you to participate in this study, you will not be asked to sign this form. However, if your parents did allow you to participate, I encourage you to participate in this study.

You do not have to be in this study. No one will be mad at you if you decide not to do this study. Nothing bad will happen if you take part in the study and nothing bad will happen if you do not. However, if you decide not to participate you still will work in groups and do all of the work that we will do; I will just not use your work in my research. Even if you start, you can stop later if you want. You may ask questions about the study.

If you decide to be in the study, I will keep your information confidential. This means that I will not use your names or the name of the school in anything I write and I will not reveal any personal, identifying information about you.

Signing this form means that you have read it or have had it read to you, and that you are willing to be in this study. If at any point you have any questions, please ask me!

Thanks,

Ms. Allen

I have been read the above letter, all my questions have been answered, and I agree to participate in the project.

_____   _____
(Student Signature)   (Date)

I, _____ will keep your names confidential.

_____   _____
(Student Teacher/Researcher Signature)   (Date)

Appendix D

Student Survey Questions

Name: _____

Week 1 Survey: Control

1. When I was writing, I felt…

     Focused   Distracted   Neither

2. I write best when…

     It's quiet   I listen to music   I'm not sure

Week 2 and 3 Surveys: Experimental

1. When I was writing, I noticed the music…

     The whole time   Some of the time   Not at all

2. I found the music to be…

     Relaxing   Energetic   Other: _____

3. When I was writing, I felt…

     Focused   Distracted   Neither

4. I write best when…

     It's quiet   I listen to music   I'm not sure

5. Would you listen to this kind of music again while writing?

     Yes   No   I'm not sure

Appendix E

Observation Sheet

(fill out one per participant, each week)

Name: _____

The student was writing….

___ Most of the time

___Some of the time

During the majority of writing time, the student was…

___ Tapping/chewing pencil   ___ Writing

___ Looking around the room   ___ Looking at paper

___ Chatting with peers   ___ Silent

___ Fidgeting   ___ Sitting still

___ Other behaviors: _____

Appendix F

Composition Analysis Sheet

(Fill out one per student)

Name: _____

PROMPT 1:   **PROMPT 2:**   **PROMPT 3:**
SILENT   ORCHESTRAL   ELECTRONIC

1. # of Sentences: ____   1. # of Sentences: ____   1. # of Sentences: ____

2. Stayed on Topic…   2. Stayed on Topic…   2. Stayed on Topic…

   a. most of the time   a. most of the time   a. most of the time

   b. some of the time   b. some of the time   b. some of the time

   c. not at all   c. not at all   c. not at all

3. Presence of…   3. Presence of…   3. Presence of …

   __doodles   __doodles   __doodles

   __many eraser marks   __many eraser marks   __many eraser marks

   __exaggerated marks   __exaggerated marks   __exaggerated marks

   __other: _____   __other: _____   __other: _____