The Impact of Interactive Technology on Student Motivation in an All-Male High School Vocal Ensemble

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ABSTRACT

The Impact of Interactive Technology on Student Motivation in an All-Male High School Vocal Ensemble
(May 2015)

Matthew Schwartz, B.M. Temple University
Research Project Supervisor: Elizabeth Sokolowski

STATEMENT OF PURPOSE

The purpose of this study is to investigate the effects of interactive technology on student motivation. *Interactive technology* shall be defined as hardware and software that not only delivers digital content to the student, but also allows the student to explore and manipulate that content in various ways. The Treblemakers, a vocal ensemble at St. Joseph's Preparatory School in Philadelphia, will participate in an empirical study that aims to determine if the use of interactive technology as a practice tool has a positive effect, a negative effect, or no effect at all on student motivation. For the purposes of this study, student motivation will be measured by both the amount of time spent practicing as well as self-reported levels of engagement, effectiveness of practice sessions, confidence, and enjoyment.

RATIONALE

Student motivation, whether driven by intrinsic or extrinsic factors, fundamentally deals with their desire to participate in the learning process. Motivation to learn involves the meaningfulness, value, and benefits of academic tasks - regardless of whether or not they are intrinsically interesting - and is characterized by long-term, high quality investment and commitment to the process of learning. (Lumsden 2)

As an educator, I see firsthand that the motivation to learn is a crucial element needed for students to be successful. As a musician educator, I am especially interested in the idea of students being motivated to practice efficiently and effectively. This type of practice cultivates true intrinsic motivation that results in greater confidence, commitment and persistence, and the desire to perform music for one's own pleasure. (Pike 12)

The incorporation of technology into educational curriculums is currently a topic of great debate. On the one hand are those educators who feel that technology is negatively effecting time usage and diminishing both attention cycles as well as the ability to focus on the task at hand (Pike 2). On the other hand, many educators see technology as an opportunity to encourage in active rather than passive learning (Forest 35). Clearly, some educators believe that technology can engage students, while others believe it might only distract them.

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CHAPTER 1: INTRODUCTION

PURPOSE

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DETAILS & GOALS OF THE STUDY

This study is based upon providing students with two different practice resources to use at home. Sheet music and mp3's will function as the control treatment condition, while the Avid Scorch iPad app will function as the experimental treatment condition. Each student will have a chance to learn one song via the control treatment and one song via the experimental treatment. Due to the number of iPads available, the students will be split into two groups that will use each of the treatment conditions separately. For the first two weeks, one group will learn Song 1 with the control treatment while the other group learns Song 1 with the experimental treatment. For the second two weeks, the groups will learn Song 2 with the other treatment condition. During each two-week period, the participants will regularly fill out practice logs, surveys, and submit comments. The data gathered will focus on the amount of time spent practicing, as well as self-reported levels of engagement and effectiveness of practice sessions, confidence, and enjoyment. Since

two different songs are needed, every effort will be made to select repertoire that is similar in style, difficulty, and range in order to minimize inconsistencies in the data.

The goal of this study is to obtain evidence that using interactive technology has some impact on student motivation. The essential question that I hope to answer is this: Within the context of practicing music at home, does the use of interactive technology have a measurable impact on student motivation? The expected outcome would be that it has a positive impact on motivation and thus is beneficial to the student, but it is certainly possible that may not be the case. If the results do in fact turn out as expected, it is my hope to use this study to secure funding for interactive technology tools for use in my department. In addition, I would like to share my findings with my colleagues here at St. Joseph's Prep no matter what the conclusions may be. There is currently a lot of tension among our faculty regarding the use of technology, and I believe it would be helpful for them to see some data that came from our very own student body.

CHAPTER 2: STUDENT MOTIVATION & TREATMENT CONDITIONS

STUDENT MOTIVATION

When we are all infants and young children, the motivation to learn is driven by an intense curiosity to explore and interact with our environment. However, as we become older this intensity weakens and learning seems to become more of a chore rather than a pleasure. This may lead to mentally absent students who fail to fully invest in the learning process. Students who have a high motivation to learn will assign meaningfulness and value to academic tasks, and will exhibit long-term commitment to quality participation in the learning process. (Lumsden 1)

In the context of music education, it is extremely important for students to be motivated to practice efficiently and effectively on their own. This type of practice cultivates true intrinsic motivation that results in greater confidence, commitment and persistence, and the desire to perform music for one's own pleasure. As musician educators, we must provide our students with enjoyable practice resources that will both engage them and promote their success. (Pike 12)

This study is designed to determine if the use of interactive technology as a practice resource has an impact on student motivation. When this type of technology is applied with sound teaching strategies it can allow for increased learning achievements, as well as encourage active engagement with the content rather than passive consumption. (Forest 35)

Increasingly, as much as people are playing music in the twenty-first century, they are also playing *with* music - using technology to remix and manipulate on the fly, thus blurring the lines between playing, creating, improvising, and performing. (Tobias 31)

The students participating in this study will have the opportunity to work with two different practice resources, which are described in detail in the next sections. Student motivation will be assessed at regular intervals throughout the study by collecting logs of the amount of time spent practicing, as well as survey data on self-reported levels of engagement, effectiveness of practice sessions, confidence, and enjoyment.

CONTROL TREATMENT CONDITION

The practice resource that will function as the control treatment condition in this study is traditional sheet music with learning track mp3s. Each voice part will have its own learning track mp3 for which that particular part is panned to the left, with the other voice parts panned to the right. This gives each student the ability to isolate their part by itself by using only the left ear bud, to hear all the parts together by using both ear buds, or to remove their part completely from the mix by using only the right ear bud.

Using this practice resource, the students will be able to learn their part at home by reading the sheet music while singing along with the left channel by itself. When they feel comfortable they can add in the right channel so that they can sing along with all of the other parts, while still hearing their own part in the left channel. Finally, when they feel they have mastered their part, they can remove the left channel and sing along with the right channel so that they are solely responsible for their voice part. While this control treatment would certainly qualify as a type of technology, it is only delivering static content to the student and allows for minimal interaction.

EXPERIMENTAL TREATMENT CONDITION

The practice resource that will function as the experimental treatment condition is a touchscreen iPad tablet pre-loaded with the Avid Scorch app. This app can open the

Sibelius score for the particular song in question, and allows the student to interact with and manipulate the content of that score in the following ways:

- read the music on the tablet as it plays the parts
- start/stop playback at any point in the score by selecting a particular bar
- visually watch a ticker pass through the bars of music as it plays back, thus increasing the connection between reading, hearing, and singing the music
- add a metronome click track
- manipulate the tempo in order to practice at different speeds
- view either the full score, or any of the voice parts independently
- mute and pan each voice part independently (resulting in playback of any one, two, three,

  or four parts together, in any left/right configuration)

The dynamic and interactive nature of this sophisticated app can lead to a transformative change in student learning (Riley 82). Using this technology not only allows students to see, hear, and feel music in a new and engaging way, but also gives them direct control over many music parameters (Nelson 27). This practice resource has the potential to draw the focus of students and increase both their motivation to practice and learn, as well as increase their successful time on task (Nelson 28).

CHAPTER 3: STUDY DESIGN & METHODS

STUDY DESIGN

This study will utilize a *within-subjects design* in which participants will be placed into two groups - Group A and Group B - that will each spend two weeks with the control treatment condition and two weeks with the experimental treatment condition (Bordens 220). One of the major advantages of within-subjects design is that "each subject is matched with other subjects who are virtual clones of each other, because they are in fact the same subject, and therefore all subject-related factors (such as age, IQ, personality) are literally identical across treatments" (Bordens 222). A potential disadvantage of within-subjects design are the carryover effects that can occur if a participant's behavior is altered due to exposure to a previous treatment condition (Bordens 222).

Out of the twelve students that participated in the study, eight of them owned an iPad. In order to normalize the groups, four of these were put into Group A along with two students who did not own iPads, and four were put into Group B along with the remaining two students who did not own iPads. The extra two iPads needed were provided by the music director.

REPERTOIRE SELECTION

Since two song selections are needed for the study, pieces similar in style, difficulty, and range were used in order to minimize inconsistencies in the data. *Adieu, Sweet Amaryllis* and *April Is In My Mistress Face* are both Old English madrigals of moderate difficulty in the key of G minor. Each was arranged in four parts for a TTBB

male vocal ensemble, so the ranges of each voice part are comparable. The sheet music for both selections can be found in Appendix A.

PRACTICE LOG

The practice log was designed to provide each student with a format for recording the amount of time spent using the practice resource each day for a two-week period. Students also had the option of tracking and submitting their practice minutes digitally. The practice log can be found in Appendix B.

SURVEY

Each item on the survey was designed to measure the following indicators of student motivation for each of the practice resource treatment conditions:

1. Motivation to practice outside of ensemble rehearsals
2. Engagement with the practice resources
3. Connection with the music
4. Effectiveness in learning the music
5. Confidence in knowing the music
6. Enjoyment of practice

Students scored each item on a scale of 1 (Strongly Disagree) to 7 (Strongly Agree). At the end of the survey, there was also a place for students to write in any additional comments or reactions to the survey items. It is important to note that Item 4 was phrased as a negative - *The practice tools provided DO NOT help me learn my part* - to ensure that participants actually paid attention to the phrasing of each survey question. When all the data was gathered, this item was reversed scored for consistency with the

rest of the items. During the study, the survey was distributed online via Google Forms. The survey can be found in Appendix C.

PRACTICE RESOURCE INSTRUCTIONS

While the process of using the control treatment practice resources is very straightforward - open the mp3 file for your voice part and sing along while reading the sheet music - the process for using the experimental Avid Scorch App with a Sibelius Score is a bit more involved. For this reason, I created a *How To Use Avid Scorch* instructions document, as well as a *How To Use Avid Scorch* demo video for the students to use. The instructions document can be found in Appendix D, and the how-to demo video can be found online: https://goo.gl/IXkqPa

PROCEDURES

On the evening before the study began, all necessary documents and files were sent via email to each group for the first two-week period. Group A received a practice log, sheet music, and rehearsal mp3s. Group B received a practice log, the *Adieu, Sweet Amaryllis* Sibelius Score file, the *How To Use Avid Scorch* instructions document, the *How To Use Avid Scorch* demo video, and the Avid Scorch app (sent to their iPads). All instruction on practice resources, survey administration, and collection of practice logs occurred over the next month during the ensemble's weekly rehearsals.

The following day, the two students in Group B who did not own iPads came ahead of time to pick up the devices they would be using. At the beginning of rehearsal, all students took the survey for the first time, which would serve as their overall baseline score. Group A was then given verbal instructions for using the control treatment practice resources, and Group B was given verbal instructions for using the experimental

treatment practices resources. All students were given copies of the practice log with instructions, and then rehearsal carried on as normal. Throughout the week, emails were sent reminding the students to log their practice time. At the next week's rehearsal, the students took the survey for a second time after one week using the provided practice resources. Again, rehearsal carried on as normal and emails were sent reminding the students to log their practice time.

At the end of the second week, students took the survey a third time and their practice logs were collected. Then the treatment conditions switched, and the entire process repeated itself with the second song. Group A received a practice log, the *April Is In My Mistress Face* Sibelius Score file, the *How To Use Avid Scorch* instructions document, the *How To Use Avid Scorch* demo video, and the Avid Scorch app (sent to their iPads). Group B received a practice log, sheet music, and rehearsal mp3s. The students used these practice resources for another two weeks, taking the survey two more times, and turning in another practice log at the end of the second two-week period. By the end of the study, every student participant had submitted the following:

- One baseline survey
- Two weekly surveys for the control treatment
- Two weekly surveys for the experimental treatment
- One two-week practice log for the control treatment
- One two-week practice log for the experimental treatment

Once all of this data had been collected, it was compiled into spreadsheets, averaged, and analyzed by comparing both the students group and the treatment condition totals.

CHAPTER 4: RESULTS - PRACTICE LOGS & SURVEY DATA

In order to identify important trends that impact the conclusions of the study, data from the practice logs and surveys was compiled and analyzed by comparing both the student groups and the treatment conditions. Comparing the student groups provides insight into the differences of the individual students in Group A versus Group B, while comparing the treatment conditions provides an overall view of how all of the students together reacted to both the control and the iPad treatments. The following figures illustrate these comparisons:

PRACTICE LOGS

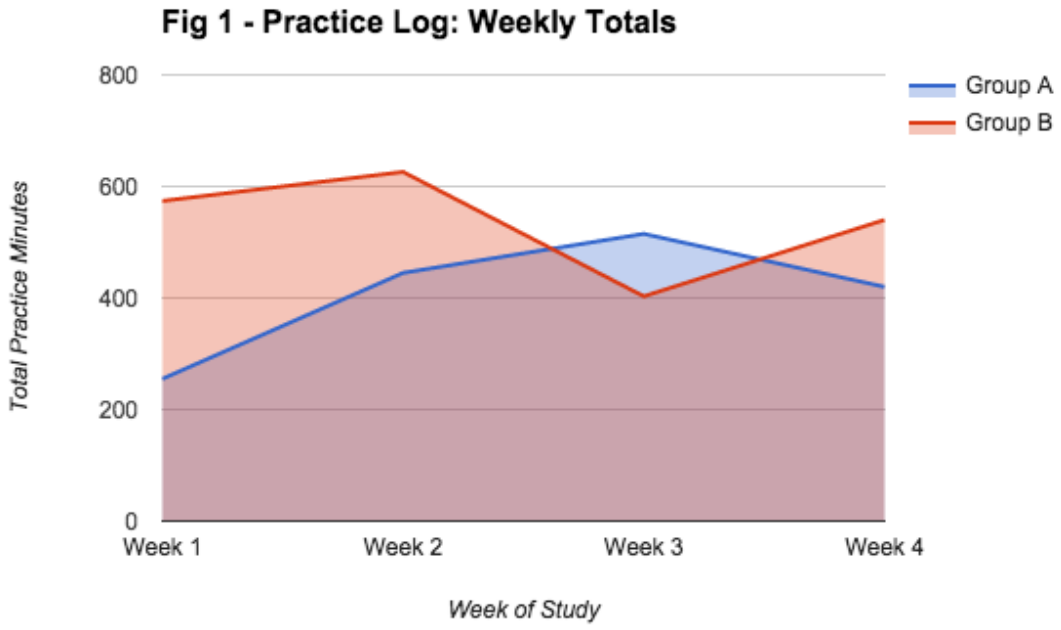


Fig 1 shows the total number of practice minutes for each student group tracked through each week of the study. During the first two weeks of the study, Group A used the control treatment condition and saw their numbers jump from 255 up to 445, an

increase of 75%. This difference is striking because it is the largest by far when no change in treatment condition occurred. At Week 3 this group switched to the iPad treatment condition and saw an increase of 13% over the previous week. This group saw an 18% decrease in practice time during the final week, which is the only time a drop in minutes occurred for either group during a two week period of the same treatment condition. This may be due to the fact that it was the week before the students left for spring break, or possibly that it was the very last week of the study itself, both of which suggest a lower level of intrinsic motivation in this group of students.

Group B began the study with the iPad treatment condition for the first two weeks and saw their numbers increase by 9%, from 574 to 626. At Week 3 this group switched to the control treatment condition and their number dropped to 403, a 36% decrease from the previous week. However at Week 4, their second week with the control, this group had increased their practice minutes by 34% from the previous week. This may suggest a high level of motivation to finish the study out strong.

It is important to note that Week 3 is the only week in the entire study during which students in Group B practiced fewer total minutes than those in Group A. This corresponds directly to the point at which the treatment conditions switched; Group A going from control to iPad, and Group B going from iPad to control.

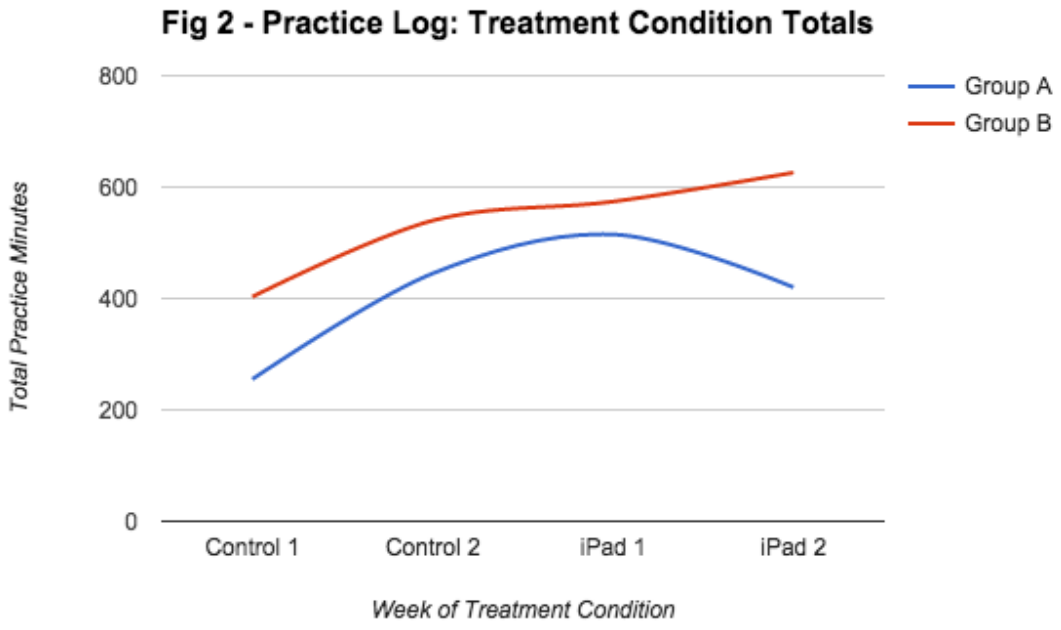


Fig 2 presents the weekly practice totals for each student group by treatment condition rather than chronologically. Data presented in this way reveals that the largest increase in practice minutes for both groups occurred between Control Week 1 and Control Week 2 - 75% for Group A and 34% for Group B. This could possibly suggest that all of the students felt they needed to practice more during their respective control treatments in order to master the material. Fig 2 also reveals that Group B consistently had higher practice minutes per treatment condition. This may suggest that these individual students had a higher level of intrinsic motivation to begin with, and may be why they did not see the same decrease that Group A did in that final week of the study.

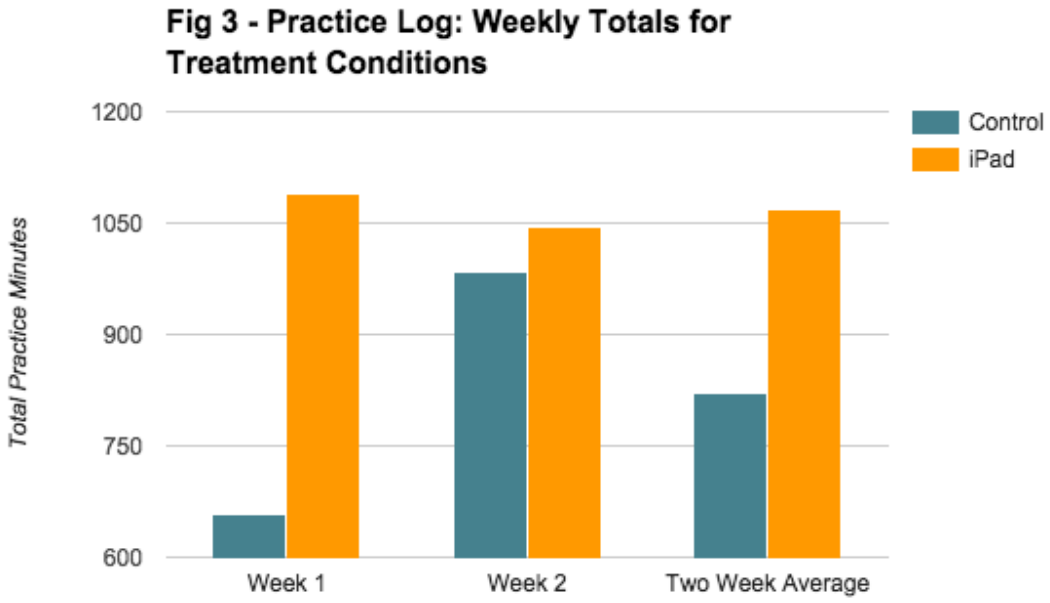
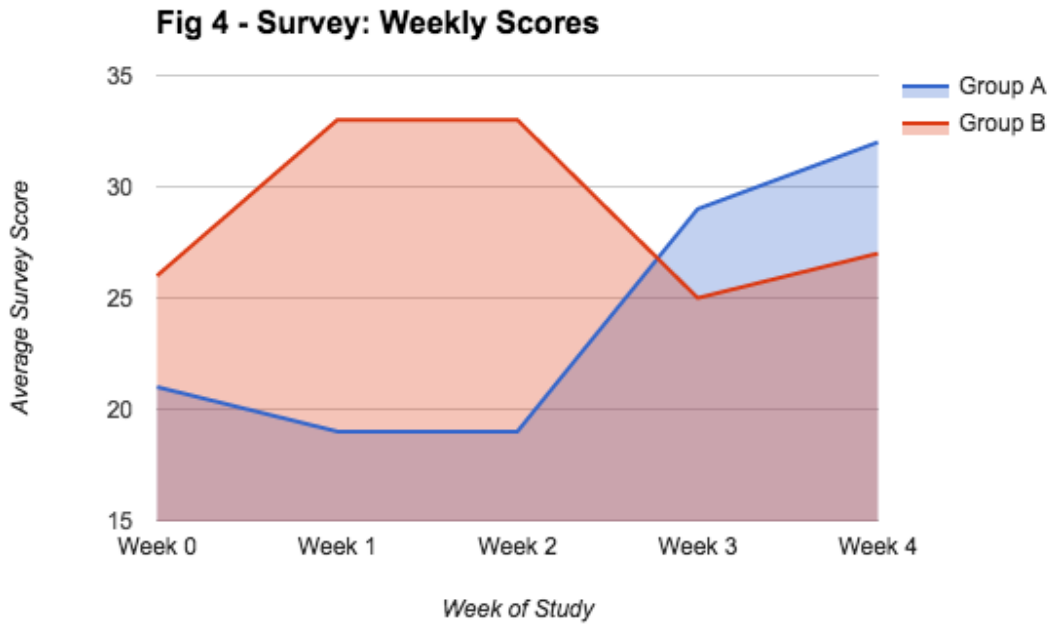


Fig 3 contains the practice totals of each treatment condition. This provides an overall comparison of practice time between the iPads and the control group. During the first week of the treatment period, students practiced 65% more with the iPads than they did with the control. However, during the second week of the treatment period there is an increase in minutes practiced with the control and a slight decrease in minutes practiced with the iPads. Again this could suggest not only that all of the students felt they needed to practice more with the control treatment, but also that the iPads had a high impact at the beginning of the treatment period which then decreased over time. Overall, a two week average of all practice minutes together for each treatment condition shows that students spent 30% more time using the iPads than they did with the control treatment.

SURVEY



Week 0 serves as a baseline measurement before any of the treatment conditions were administered. Fig 4 tracks the average total survey score for each student group throughout the course of the study. Group A begins with a baseline of 21, which then drops 9.5% to a 19 for both weeks of their control treatment. When this group of students switches to the iPad treatment in Week 3, their average survey scores climbs to 29. By Week 4 their average has risen to 32, which is 52% higher than their baseline score.

Students in Group B begin with a baseline of 26, which then rises 27% up to 33 for both weeks of their iPad treatment. When they switch to the control treatment, their survey scores drop to 25 in Week 3 and 27 in Week 4. Both of these scores are exactly one point away from their initial baseline score.

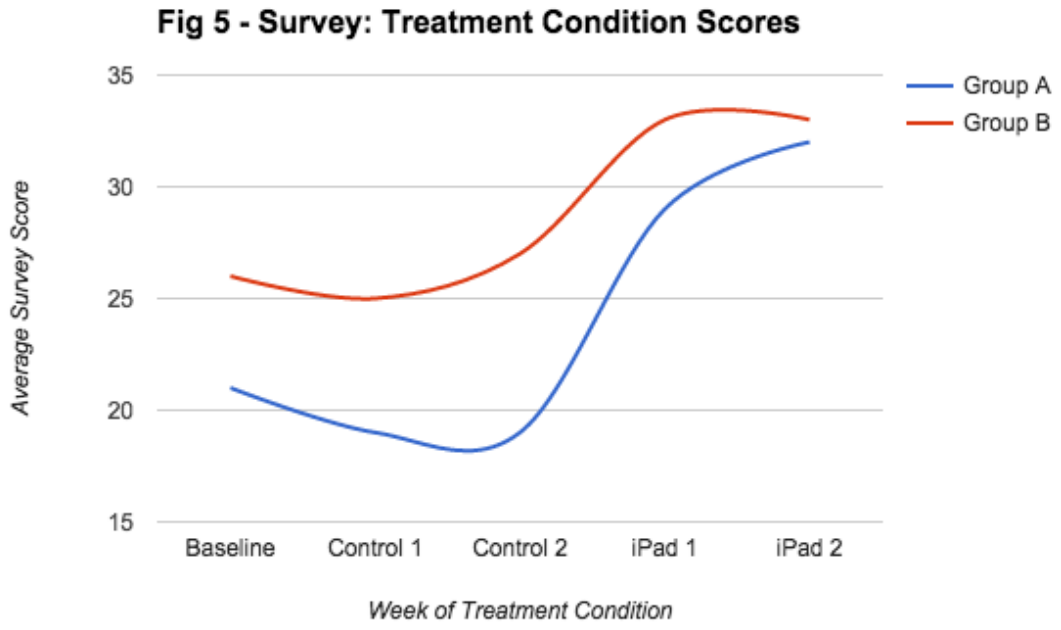


Fig 5 illustrates that both student groups saw a slight drop in survey scores during their first week of the control treatment when compared to their baseline. Group B sees scores within 4% of baseline for both of their control treatment weeks, and scores that jump 27% for their iPad treatment weeks. Group A sees a larger range, with scores around 10% of baseline for both of their control treatment weeks, which then jump 52% for the iPad treatment the end of the study. Also, both groups' survey scores follow the same S-Curve shape when organized by treatment condition, which suggests that their reactions to the practice resources followed the same trend even though their reported levels of motivation were different.

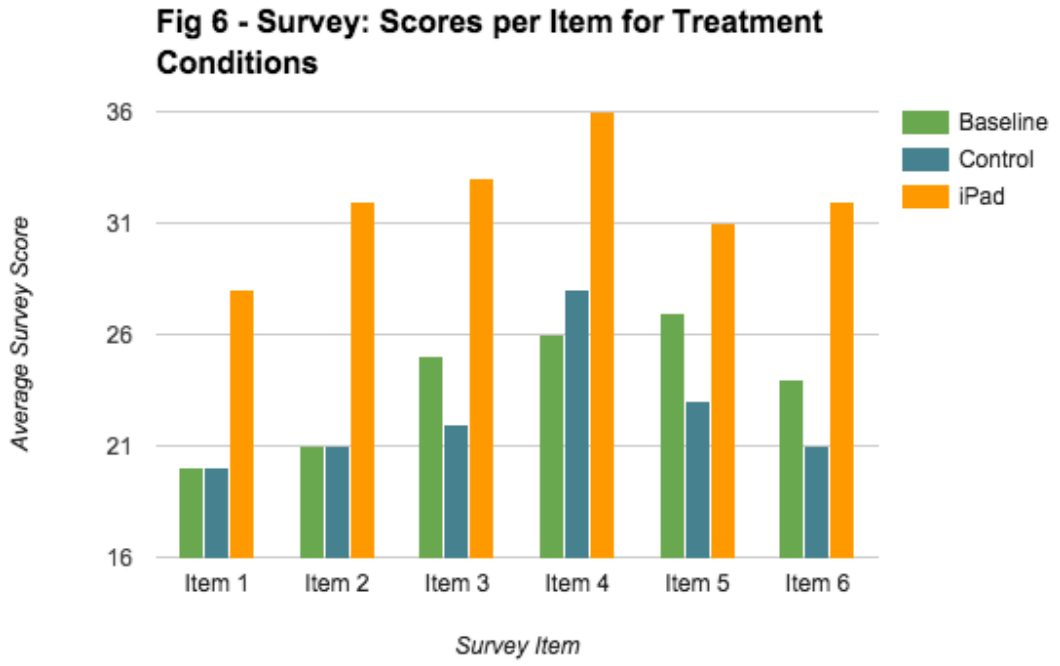
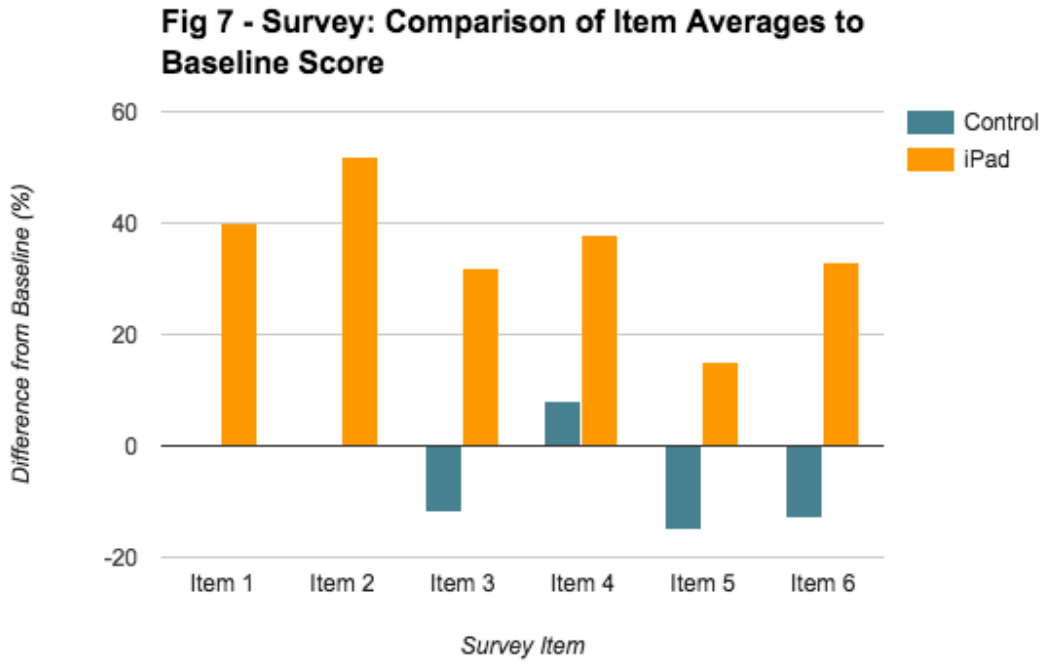


Fig 6 contains each survey item's average score for each treatment condition. This data represents the total average for both student groups together. The iPad clearly outscores both the baseline and control on every single item. Item 2 *"I feel engaged with the practice tools provided"* shows the largest difference between the iPad versus the baseline and control. This may suggest that the interactive technology is very effective at keeping the students engaged. Item 4 *"The practice tools provided DO NOT help me learn my part"* (reverse scored) is the only instance where the control scored higher than the baseline. This suggests that while the control treatment was not nearly as effective as the iPad treatment, it still did help students to learn their parts somewhat.

Interestingly, the iPad outscored the baseline by an average of 8 points, but outscored the control by an average of 10 points. This may suggest that the students were more critical when comparing the two treatment conditions during the study than they were when the baseline was obtained before the treatment conditions were administered.



Another way to analyze the survey data is to compare the baseline to the treatment conditions for each survey item as seen in Fig 7. For every single item, the iPad treatment scores higher than the baseline, and in five out of six items the difference is higher than 30%. Conversely, the control treatment only scores higher than the baseline on one out of six of the items, with two items scoring equal to baseline and three items scoring lower. Overall, the control treatment scores averaged 5% lower than the baseline while the iPad treatment scores averaged 35% higher than the baseline.

The fact that the control scores averaged so close to baseline (5%) while the iPad scores averaged much higher (35%) may speak to the degree of impact that each treatment condition had. The iPad treatment could have had this much impact because it was more effective, but it also could be that it was just a new technological tool that the students were excited to use. It would be interesting to see if this trend continued over a longer period of time.

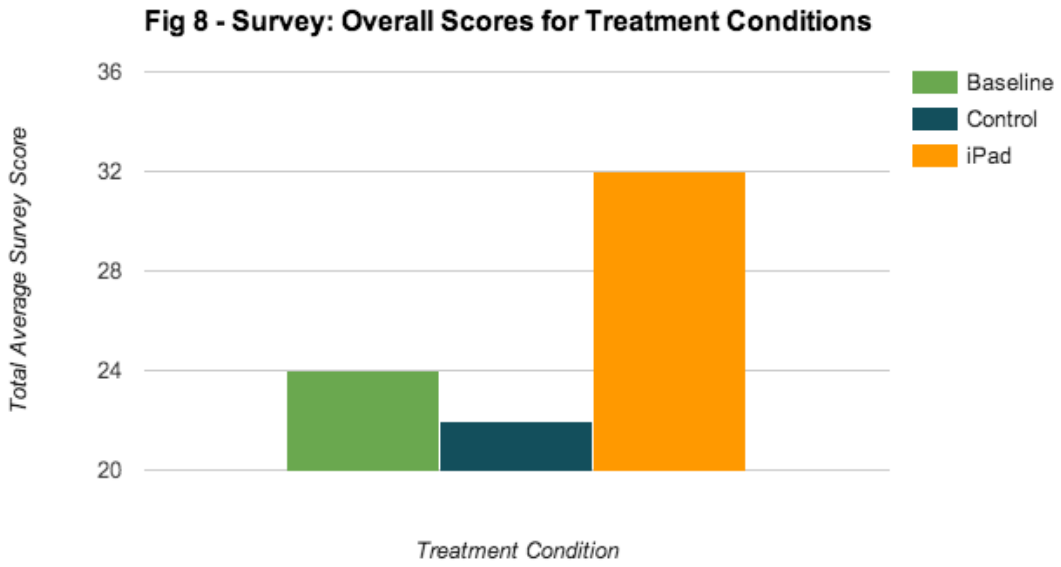


Fig 8 shows the total average scores of all the survey items together for the initial baseline survey and each treatment condition. Each item on the survey aimed to capture a measurement of a single component of a student's motivation. Therefore, when all of the items are considered together, the results are a good indicator of how each treatment condition affected students' overall motivation. While the average score for the iPad treatment is 33% above baseline, the average survey score for the control treatment was actually 8% lower than the baseline. While this could suggest that the control treatment actually had a negative effect on student motivation, it could also be a carryover effect due to the fact that the students became much more critical of the control treatment once the study began. Similarly, part of the iPad treatment's success might be due to the fact that the students were especially excited about using a new technology.

COMMENTS

The following comments taken from the surveys provide additional insight into the participants' reactions to the treatment conditions.

Regarding the control treatment:

"Not too inspirational"

"Same old same old. Nothing's really changed to be honest"

"I haven't practiced"

"I don't really like practicing by myself. I'm more motivated in the group"

Regarding the experimental treatment:

"I like seeing which notes are sounding when they are"

"The keyboard feature of the app is very helpful because I can use my piano to learn the part and learn the pitches"

"Avid Scorch was extremely helpful especially with the ability to solo parts and adjust tempo"

"I felt like I had to dedicate a large chunk of time (which I didn't have) to manipulate the tools on scorch. When practicing with the MP3, I could just listen as I did homework"

"I feel like using scorch does make practicing a more enjoyable experience as it allows me to fiddle around with the music in ways that can help me to gradually learn my part. The ability to mess with the tempo and which parts I here and see really helps facilitate the process"

"I actually tried avid scorch before bed and it kept me up longer than I expected because I wanted to keep practicing"

“I don't think using Scorch made me substantially more motivated to practice the music (there was a slight trend but nothing too eye grabbing), but I do think the interactivity of the software made practicing a more enjoyable experience as a whole”

“I tried to practice regularly, but I wasn't motivated to do it very long. No more than 20 mins at a time”

These comments reveal some of the more subtle nuances of how the students reacted to the practice resources. Overall, the feedback regarding the control treatment was either neutral or somewhat negative while the feedback regarding the iPad treatment was overwhelmingly positive. There were some exceptions to this, however. One student felt that the Avid Scorch user interface was clunky and time consuming, while another said he enjoyed using the app but it did not have an impact on his motivation.

ESSENTIAL OUTCOME

Considering all of this data together, the iPad treatment scored much higher than the control treatment on both the practice logs and the surveys. Students spent 30% more time practicing with the iPad treatment than they did with the control treatment, and the iPad treatment scored 33% higher when all the survey scores were averaged together. Overall, this data presents a clear answer to the essential question: Within the context of practicing music at home, the use of interactive technology does in fact have a measurable positive impact on student motivation.

CHAPTER 5: CONCLUSION

The results of the study clearly indicate that the use of interactive technology has a measurable positive effect on student motivation within the context of practicing music at home, but some important considerations must be made. First, the total number of participants (12) is relatively low for an empirical study. Second, all participants were high-school aged males with similar demographic profiles, which only represents a small portion of the actual population. Third, the within-subjects design may have resulted in carryover effects that could have inflated both the negative scores of the control treatment as well as the positive scores of the experimental treatment. Finally, the two-week length of time that participants spent with each treatment condition was relatively short, so there was not a chance to see if the initial trends in the data would fade over time.

All of these factors may have had an influence on the results of this study, and further research would need to be done to verify the findings. A future study might include male and female students of all ages and demographic profiles, across multiple schools or even districts. The results of a study on this scale, especially if students were able to spend months or even a year with each treatment condition, would give powerful weight to the findings.

Another important point to consider is that while these findings indicate a positive effect on student motivation, they do not deal at all with the actual effectiveness of interactive technology in helping students to learn their parts. A rubric to assess pitch and rhythmic accuracy could also be added to future studies to determine if there was in impact on effectiveness as well as motivation.

Overall, the impacts of this study are exciting and refreshing on my journey as a musician-educator. The results validate the use of interactive technology as yet another tool with which creative teachers can motivate, inspire, and engage their students. I look forward to sharing the results of this study with my colleagues at St. Joseph's Prep and contributing data gathered from our very own student body to the conversation surrounding the use of technology inside and outside the classroom.

Next year our school will begin a 1:1 Tech Initiative, with every single student having a Chromebook. This study has given me confidence and inspiration to find creative ways to use technology to enhance my curriculum and classroom experience. I look forward to exploring the many opportunities that technology provides to nurture excitement, engagement, and enjoyment of learning with all of my students.

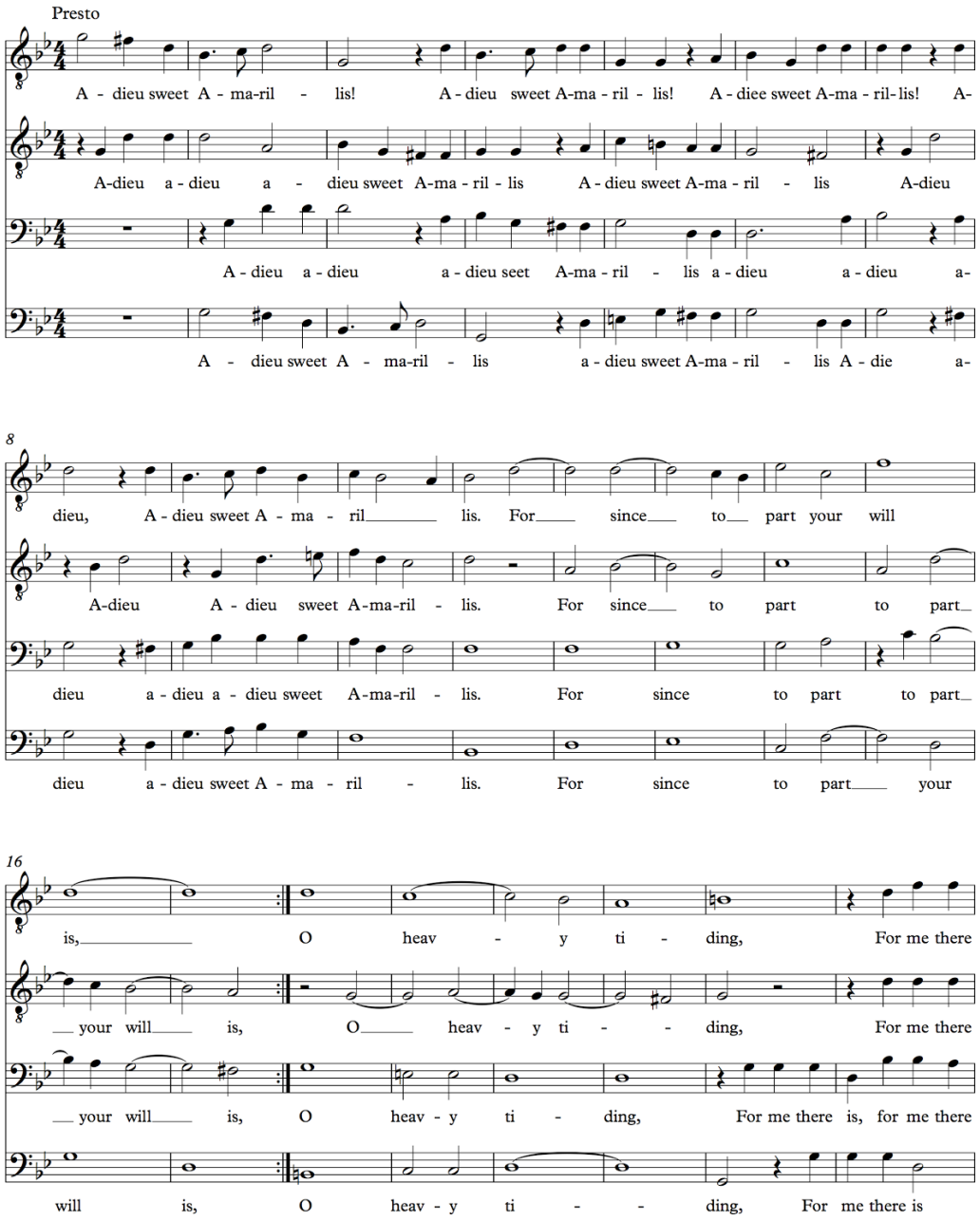
APPENDIX A: Sheet Music For Selected Repertoire

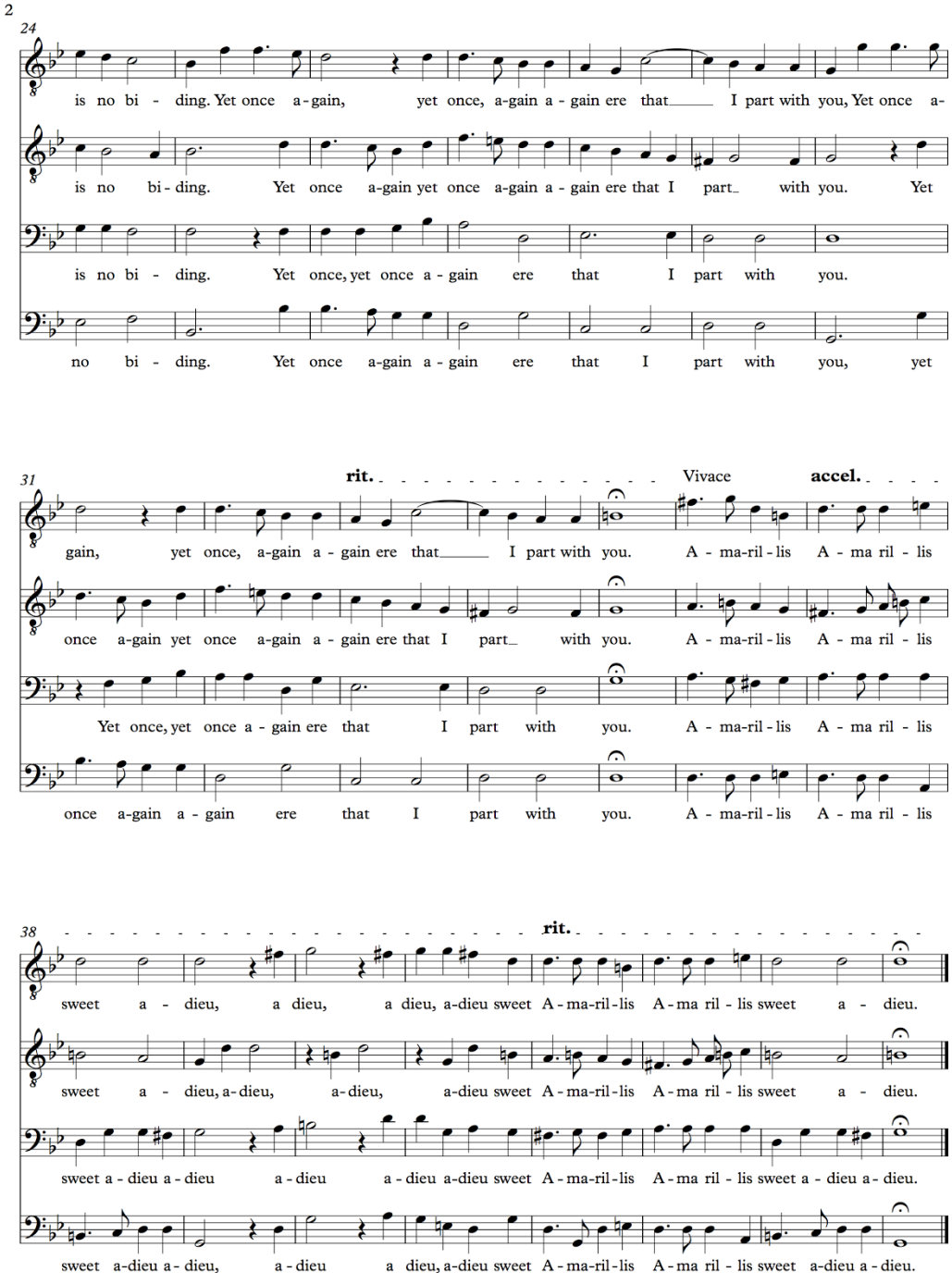
Selection 1 - “Adieu, Sweet Amaryllis” by John Wilbye arr. M Schwartz

Selection 2 - “April Is In My Mistress Face” by Thomas Morley arr. M Schwartz

Adieu, Sweet Amarillis

John Wilbye arr. M Schwartz

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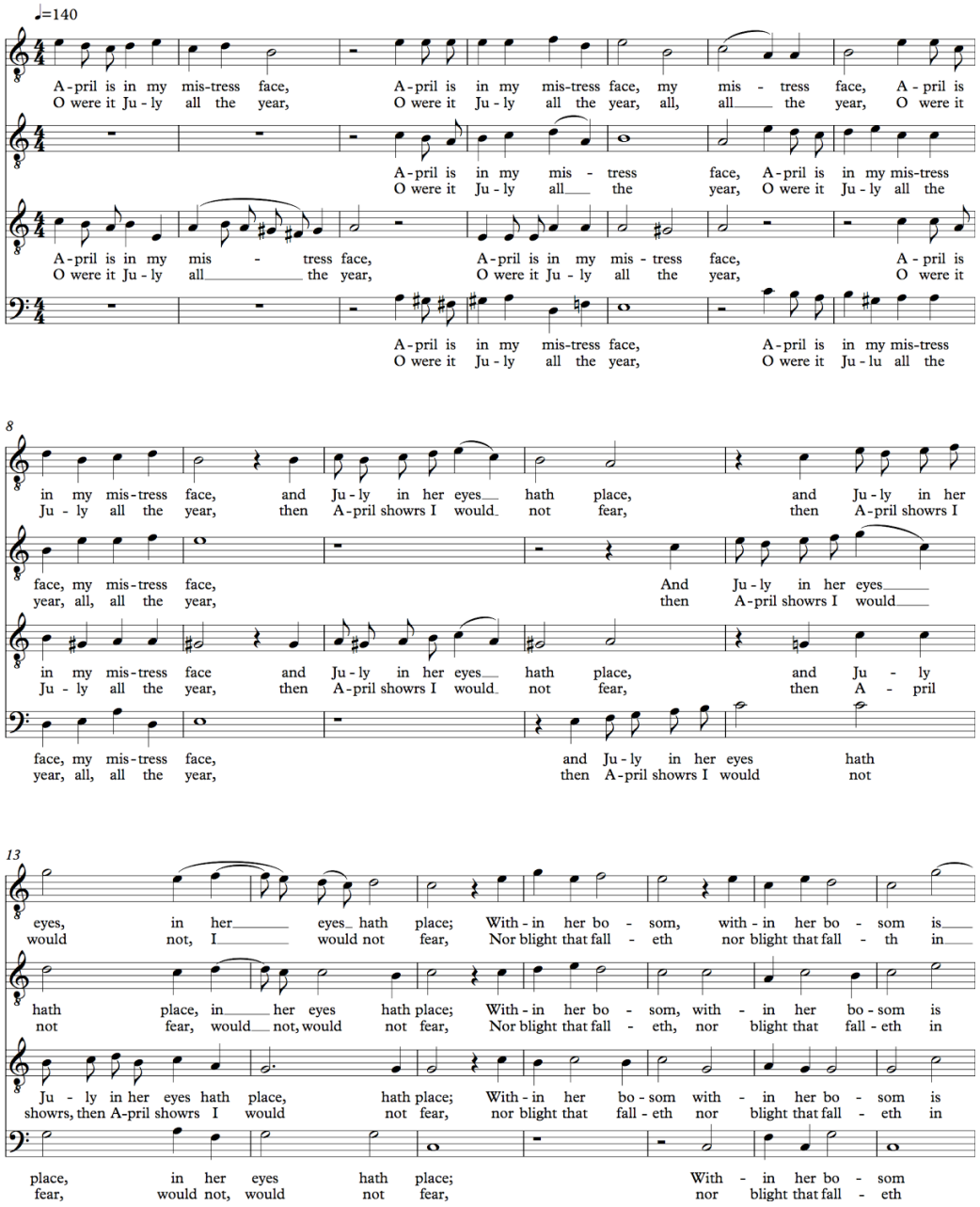
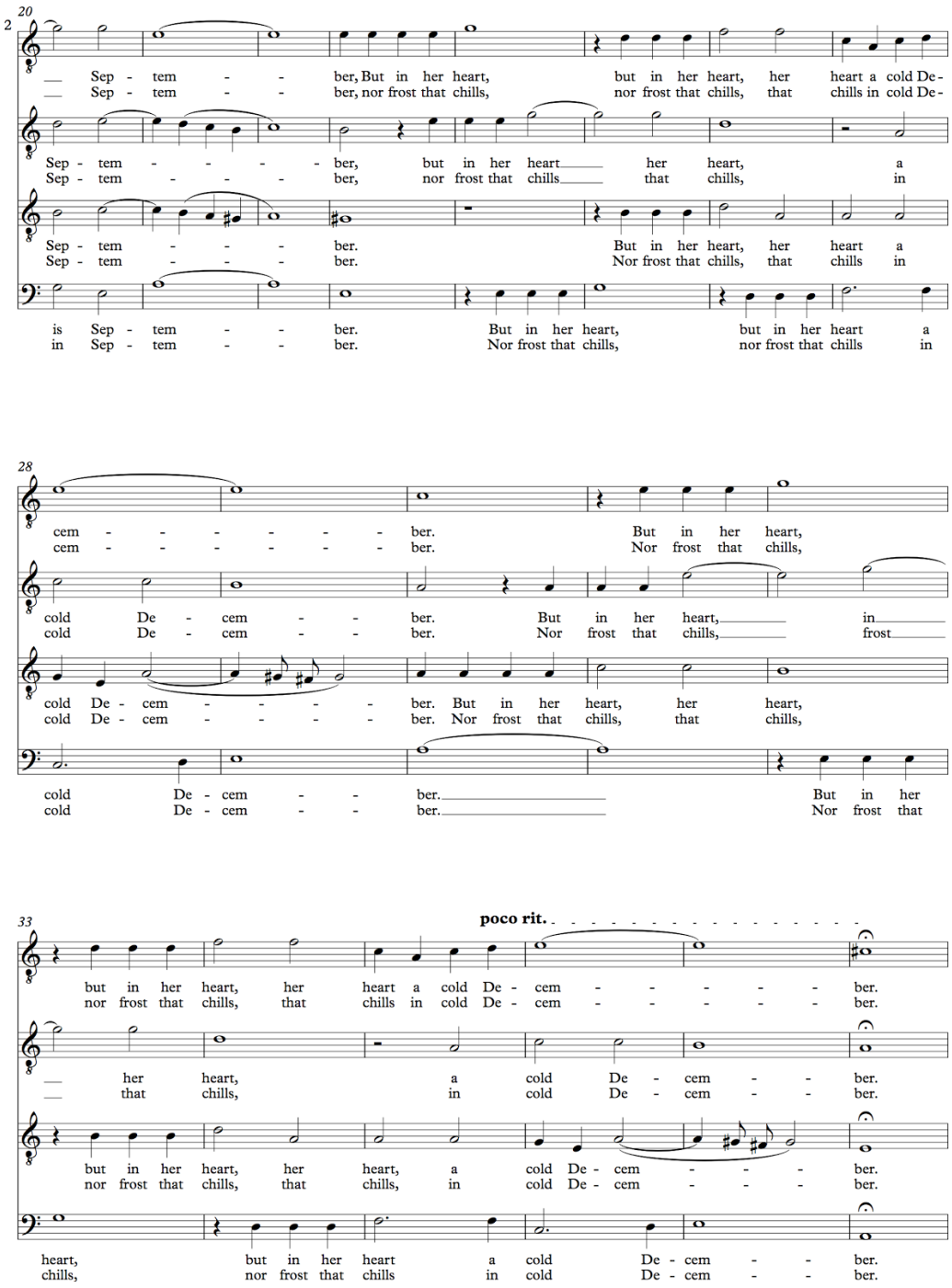
is no bi - ding. Yet once a - gain, yet once, a-gain a - gain ere that I part with you, Yet once a-
is no bi - ding. Yet once a-gain yet once a-gain a - gain ere that I part with you. Yet
is no bi - ding. Yet once, yet once a - gain ere that I part with you.
no bi - ding. Yet once a-gain a - gain ere that I part with you, yet
31
rit.
Vivace
accel.
gain, yet once, a-gain a - gain ere that I part with you. A - ma-ril - lis A - ma ril - lis
once a-gain yet once a-gain a - gain ere that I part with you. A - ma-ril - lis A - ma ril - lis
Yet once, yet once a - gain ere that I part with you. A - ma-ril - lis A - ma ril - lis
once a-gain a - gain ere that I part with you. A - ma-ril - lis A - ma ril - lis
38
rit.
sweet a - dieu, a dieu, a dieu, a-dieu sweet A - ma-ril - lis A - ma ril - lis sweet a - dieu.
sweet a - dieu, a - dieu, a - dieu, a-dieu sweet A - ma-ril - lis A - ma ril - lis sweet a - dieu.
sweet a - dieu a - dieu a - dieu a - dieu a-dieu sweet A - ma-ril - lis A - ma ril - lis sweet a - dieu a - dieu.
sweet a-dieu a - dieu, a - dieu a dieu, a-dieu sweet A - ma-ril - lis A - ma ril - lis sweet a-dieu a - dieu.

April Is In My Mistress Face

Thomas Morley arr. M Schwartz

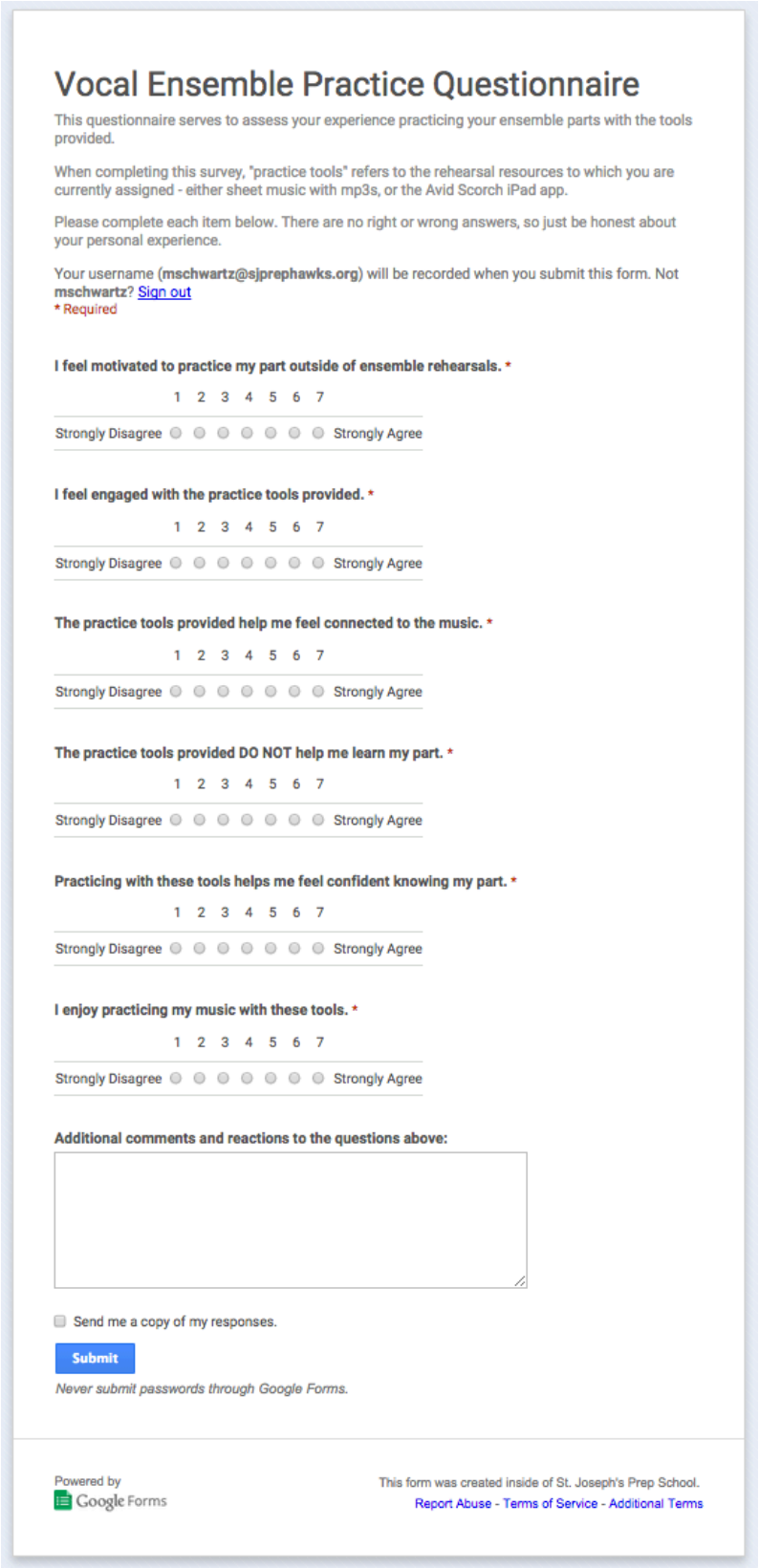



2
20
Sep - tem - - ber, But in her heart, but in her heart, her heart a cold De -
Sep - tem - - ber, nor frost that chills, nor frost that chills, that chills in cold De -
Sep - tem - - - - ber, but in her heart her heart, a
Sep - tem - - - - ber, nor frost that chills that chills, in
Sep - tem - - - ber. But in her heart, her heart a
Sep - tem - - - ber. Nor frost that chills, that chills in
is Sep - tem - - ber. But in her heart, but in her heart a
in Sep - tem - - ber. Nor frost that chills, nor frost that chills in
28
cem - - - - - - - ber. But in her heart,
cem - - - - - - - ber. Nor frost that chills,
cold De - cem - - ber. But in her heart, in
cold De - cem - - ber. Nor frost that chills, frost
cold De - cem - - - - ber. But in her heart, her heart,
cold De - cem - - - - ber. Nor frost that chills, that chills,
cold De - cem - - ber. But in her
cold De - cem - - ber. Nor frost that
33
poco rit.
but in her heart, her heart a cold De - cem - - - - - ber.
nor frost that chills, that chills in cold De - cem - - - - - ber.
her heart, a cold De - cem - - ber.
that chills, in cold De - cem - - ber.
but in her heart, her heart, a cold De - cem - - - ber.
nor frost that chills, that chills, in cold De - cem - - - ber.
heart, but in her heart a cold De - cem - - ber.
chills, nor frost that chills in cold De - cem - - ber.

APPENDIX B: Practice Log

Name:		*PRACTICE LOG*	
Day	Start Time	End Time	Total (min)
Monday 3/9			
Tuesday 3/10			
Wednesday 3/11			
Thursday 3/12			
Friday 3/13			
Saturday 3/14			
Sunday 3/15			
Monday 3/16			
Tuesday 3/17			
Wednesday 3/18			
Thursday 3/19			
Friday 3/20			
Saturday 3/21			
Sunday 3/22			

APPENDIX C: Survey



Vocal Ensemble Practice Questionnaire

This questionnaire serves to assess your experience practicing your ensemble parts with the tools provided.

When completing this survey, "practice tools" refers to the rehearsal resources to which you are currently assigned - either sheet music with mp3s, or the Avid Scorch iPad app.

Please complete each item below. There are no right or wrong answers, so just be honest about your personal experience.

Your username (**mschwartz@sjprephawks.org**) will be recorded when you submit this form. Not **mschwartz**? Sign out
* Required

I feel motivated to practice my part outside of ensemble rehearsals. *

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

I feel engaged with the practice tools provided. *

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

The practice tools provided help me feel connected to the music. *

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

The practice tools provided DO NOT help me learn my part. *

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

Practicing with these tools helps me feel confident knowing my part. *

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

I enjoy practicing my music with these tools. *

	1	2	3	4	5	6	7	
Strongly Disagree	○	○	○	○	○	○	○	Strongly Agree

Additional comments and reactions to the questions above:

☐ Send me a copy of my responses.

Submit

Never submit passwords through Google Forms.

Powered by Google Forms

This form was created inside of St. Joseph's Prep School.
Report Abuse - Terms of Service - Additional Terms

Appendix D: Instructions Document

How To Use Avid Scorch

1. Make sure you have Gmail and Google Drive installed and are signed in to your Prep account.
2. Verify that Avid Scorch is installed.
3. Access the .sib file in either your email or in Google Drive directly.
4. You'll see "Unable to open file" > Click "Open In" > Select "Avid Scorch"
5. Once the .sib file loads, you'll be able to open the score directly in the Avid Scorch App from now on.
6. Here are the available functions when the score loads:

- My Scores: returns to the score library
- Play: plays score from cursor position
- Metronome: turns metronome click on/off
- Tempo: adjustable tempo slider to slow/speed playback
- Print: prints score
- Parts: view full score or a select part
- Transpose: change the key
- Settings: change score appearance
- Music Stand Mode: removes toolbars for a full screen performance experience

7) Playback Controls:

- Long press on any part of the score to begin playback from that spot
- While playing, give a tap to the bottom middle to bring up playback controls
- Select the Up Arrow at the bottom right of the playback controls to access the mixer and keyboard
- Mixer: pan, adjust volume, mute, and solo each track separately
- Keyboard: view score/parts being played on a virtual keyboard

8) Main Ideas for Practicing:

- *USE HEADPHONES!*
- Start by viewing your part alone, and soloing it in the mixer
- Adjust the tempo to a slow comfortable pace at which you can follow along
- Experiment with adding additional tracks and adjusting their volume/panning
- Try viewing the entire score
- Try singing along with your part muted
- Basically, you are free to experiment with tempo, combining which parts to play back, mixing volumes, changing panning

EXAMPLE

I want to learn the bass part, so first I view that music by itself, solo the track, and slow down the tempo. After a few runs, I pan the bass track to the left and add the other parts at lower volumes, keeping the tempo slow. As I'm comfortable, I increase the tempo and continue to sing along. Eventually, when I'm confident with my part, I mute the bass track and sing it myself with the other tracks playing along.

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