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Teaching Sight Singing at Notre Dame Academy

An Interactive Qualifying Project

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Degree of Bachelor of Science

by

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Major Advisor

1. **sight-singing**
2. **education**
3. **music**

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Chapter 1-Introduction:

> **Sight-Singing:** *The ability to sing, without study, a piece of music that one has never seen before. This would be much like picking up a book one has never seen before and reading it 'cold'.*[1]

The goal of this project was to improve the sight-singing ability of the members of the Chamber Chorale at Notre Dame Academy. To accomplish this we taught them the basic elements of music theory:

1. rhythm
2. interval recognition
3. recognition of notes on both bass and treble clefs.

Our goals were:

1. that the members would learn how to make correlations between vocal parts in the music they were singing,
2. that the members became less dependent on accompaniment and other singers.

Hopefully, they would feel more confident on their own individual vocal parts. In addition to traditional teaching techniques, such as playing parts on a piano, various computer music programs were utilized that would teach different concepts that would aid one in acquiring sight-singing skills. For the purposes of this class we chose one program, *Practica Musica*[2], which assisted them in interval recognition. We will define the aforementioned concepts as well as the methods by which we taught them in the classroom.

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[1] Marc Rubinn, The Sight-Singer's Resource, www.4link.net/~mrubinn/sightsinger/, September 1997.

> "...skilled sightreaders are capable of...directing their attention to the more difficult parts of the score and evaluate musical material by scanning and evaluating the notation prior to commencing their performance...there seems to be general consensus among [researchers] that improving students' ability to grasp rhythmic figures can increase the rate at which they are able to read music." [3]

The following quote is in reference to a guitar player, but can be applied to any musician.

> "...some of our most important musical training takes place away from our instrument... ear training hones your ability to render with your hands what you hear in your head. Learning to recognize and reproduce intervals, melodies, chords and rhythms is almost certain to make you a better player." [4]

As stated above, sight-reading is an invaluable skill that all singers should possess to improve their personal vocal abilities as well as their musical contribution to a choir or ensemble. In addition, sight-reading also gives a singer the ability to score higher in auditions and musical examinations.

When handed a piece of music, a vocalist should be able to figure out melodic lines by making a mental recognition of intervals between the notes. Trained sight-readers already have an understanding of how the piece will sound before the piece is even played. This gives them an advantage over an untrained sight-reader before the teaching process has even begun.

> "...good sight-readers are able to scan ahead, recognizing "chunks" or patterns of up to seven notes after the music has been removed, and that when the music contains predictable or straight-forward patterns, the

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[2] *Practica Musica* is a registered product of Ars Nova: Music Learning and Creativity Software.
[3] Gary E. McPherson, Journal of Research in Music Education, vol. 42, #3, pp. 218.
[4] Guitar Player, October 1994, vol 28, n10, pp. 119.

> musician is more likely to look ahead and anticipate the flow of the music."[5]

The advantages ameliorate as the rehearsal continues. As mentioned by Professor McPherson, the sight-reader can look ahead and be prepared for the more difficult parts of the score. This is a benefit to the skilled sight-reader because it takes fewer repetitions of the piece for the vocalist to learn it in full. This saves both the teacher and students in the choir or ensemble immense amounts of time which could be spent focusing on other aspects of the piece, including phrasing and dynamics.

Another aspect of singing that is important is the understanding of basic music theory. By knowing basic theory, a vocalist can better grasp the concepts of sight singing. Basic theory includes things such as note knowledge, the ability to identify intervals, a good concept of rhythm, and the capability of reading melodic lines. We taught these basic points to the members of the Notre Dame Academy Chamber Chorale. We expected that by providing them with a good understanding of basic theory, their singing ability would improve and thus would be better prepared for the lessons we taught in sight singing at a later time. With this knowledge, we anticipated other aspects of their singing would improve such as error-detection and vocal independence.

> "Music is a natural partner with technology. The most amazing developments in music education have been driven by its creative partnership with technology."[6]

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[5] Gary E. McPherson, Journal of Research in Music Education, vol. 42, #3, pp. 217.

[6] Robert McCarthy, Electronic Learning: Tuning Into Music, May-June 1995, v. 14, n. 8, pp. 61.

It has been found there are other helpful devices in teaching basic theory and choral sight singing, namely computer programs. One example is the program called the *Harmonic Intonation Training Program* (HITP). In this program, there are three types of exercises that test listening, judging and tuning. Other popular programs include *Claire*, *Cakewalk*, *MusicBox*, *Practica Musica* and *Finale*, among many others. The program we worked with was *Practica Musica*. This program offers exercises helpful in learning rhythm, pitch, and intervals, and was a very beneficial supplement to our teaching.

We have confidence that this program, in conjunction with our teaching of the class, made the students stronger singers. By this we mean that the students became more capable of singing independently of accompaniment, as well as of other singers. In addition, they gained the ability to deduce their part from the score before hearing it played, they learned to make connections between the various voice parts, they gained knowledge of basic music theory, and they learned the pieces faster and more thoroughly. We trust they will take this knowledge with them when they join other choirs or study music in the future.

The purpose of this project at Notre Dame Academy was to work on the improvement of the students' vocal skills and musical knowledge along with their sight-reading ability by using different teaching techniques. In addition to basic teaching, incorporation of technology into the classroom aided in our teaching and enhanced the extent of their learning ability.

Chapter 2- Literature Review/Background:

Through research we came across various guidelines and results from past experiments that offer insight into the overall improvement of the musical knowledge and ability of a variety of musicians, including vocalists. We looked specifically at articles and other research materials referring to the development of musical knowledge in areas corresponding to basics of music theory, and the use of technology as an aid to learning. In addition, we also researched other topics pertaining to the enhancement of a vocalist's overall musical ability. Subject matter in this area that we examined included the overall improvement of posture and vocal techniques, and how to make a singer become less dependent on an accompaniment. At the same time we found information on how a vocal student can become more confident singing his or her part, in addition to making parallels between the different vocal parts in the music. Through our research we have found that a vocalist needs musical knowledge in order to have the musical ability that will enable them to learn how to sight-sing.

We believe that teaching the students of the Chamber Chorale the basics of music theory will help them better understand the concepts of the music they are singing. We feel that the basic points that need to be addressed are rhythm, notation, including time signatures and accidentals, and recognition of intervals.

There is an advantage in understanding the basic rhythms of a piece when it is first presented. First it is necessary to have a general knowledge of meter. This comprehension can be used to conduct oneself while sight reading the piece. This is stated adeptly by Richard P. DeLore.

> "...you will find that conducting the meter while sight-reading is a valuable tool for improving your overall performance of solo or ensemble music."[7]

Having a general knowledge of meter enables the sight-reader to look ahead in the score and select the more complicated rhythms before reaching the difficult measures and fumbling over them. Being practiced in reading rhythmic notation allows the singer to be more competent in other characteristics of music notation.

> "Researchers also have speculated that some degree of perception is necessary for a successful performance, at least relative to pitch matching. It is possible that the two skills, [performance and perception], become increasingly interrelated as task difficulty increases and as greater perception skills are needed for more complex performances. If this is true, than good sight singers should do better on perception tasks than relatively unskilled sight singers."[8]

The second half of reading music is notation and knowing what pitch one is singing. This is an important part of reading music successfully. One should be able to look at a piece of music and know what note they are singing and for how long, otherwise they will not be in synchronization with the other vocal parts. Although it is not mandatory that one know every key signature, it is exceedingly helpful if they know what notes are going to be sharped or flatted while singing. After having a good grasp of meter it is important to comprehend the time signature presented at the beginning of the piece, as well as at any meter changes within the piece. With all this knowledge the sight-reader is well on his/her way to being fully prepared to sing mellifluously.

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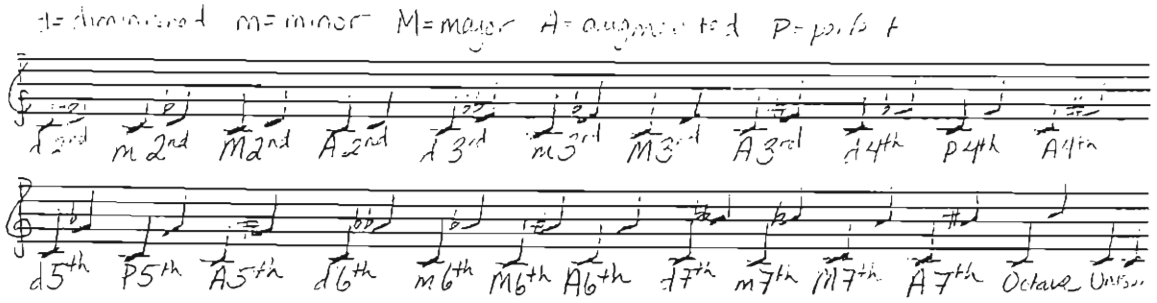
[7] Richard P. DeLore, Literature and Materials for Sight Singing, ©1981, Holt, Reinhart, and Winston, USA.

The final component that we consider important when learning music basics is recognition of intervals. It is important to be able to identify and sing intervals such as seconds, thirds, fourths, fifths, sixths, sevenths, and octaves. The intervals we taught in class were (these are also found on the Intervals and Notes sheet in Appendix D):



Once the vocalist has a refined discernment of those intervals, s/he will be able to derive the more complicated intervals such as those that are minor or augmented. With the comprehension of meter, notation and intervals, a vocalist can obtain a very thorough conceptualization of a piece before ever hearing it played.

Helpful tools that can be easily utilized are computer programs designed to teach almost anything a student would desire to know, including music basics.

> "The value of computer-based instruction for the development of a variety of aural musical skills is well established. Computer-based

[8] Janice N. Killian, Journal of Research in Music Education, 1991, vol. 39, #3, pp. 223.

> instructions may even hold advantages over the use of human teachers for certain types of instruction."[9]

Along with the programs designed for the notation of music, such as, *Finale*, *Performer*, *Cakewalk*, *Protracks*, and more, there are also various instruction-based programs available for all age levels. Some programs of this type that exist are *Practica Musica*, which we will be using with the Chamber Chorale, *Songworks*, *BeatBox*, *Claire*, and the *Harmonic Intonation Training Program*, otherwise known as HITP. This is how the creator of HITP, describes the program:

> "...[I] designed three types of exercises. In the listening exercises, the student was able to select the mistuning of intervals, chords and musical passages and to compare those mistunings to intune examples in equal temperament in just intonation. The listening exercises served as practice for the judging exercises in which the student was asked to make discriminations about the location (voice) and type of intonation errors in musical examples. In the tuning exercises, the student tuned intervals and chords by altering the pitch of one of the tones through keyboard input."[10]

The program available at Notre Dame Academy, which we chose to use in the classroom, was *Practica Musica*. Similar to HITP, *Practica Musica* offers another approach to learning through exercises. Some drills we considered to be useful supplements to our teaching in the *Practica Musica* program included exercises on pitch and rhythm matching, interval playing, interval spelling and interval ear training. To get the best idea

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[9] *A Computer-Based Training Program for Developing Harmonic Intonation Discrimination Skill*, Journal of Research in Music Education, Spring 1992, vol. 40, #2, pp. 139.
[10] *A Computer-Based Training Program for Developing Harmonic Intonation Discrimination Skill*, Journal of Research in Music Education, Spring 1992, vol. 40, #2, pp. 142.

of how beneficial the program would be, we tried it out ourselves. Most often the pitch, rhythm and/or interval is played and the student is required to match the note using the mouse on the program's virtual keyboard. During our review of the program, we found it to be both challenging and informative. We felt it would be a successful addition to our lesson plans. The knowledge gained from repeated practice of these music basics will help the students become more confident overall in their singing ability.

We have discovered that a test of a student's current musical knowledge and ability is an important part of teaching. It allows us to measure how much the student has already learned, and afterwards what has been gained from our teaching. It has been found that in most choirs the best sight-singers are those with ethnic makeup/locale of school, have a piano in their home, have previous experience with a musical instrument, and had a choir teacher who taught them sight-singing.[8] Numerous tests have been developed to evaluate musical ability but they are for large data groups and inapplicable to our experiment. We have decided to test the Chamber Chorale using a point system that will be discussed later in our procedure.

A confident singer is able to hear his or her own part and successfully carry it through out the piece. Our research for this subject is our combined singing experience of over twenty years. In almost every choir, if a director is unsure of a singer's competence, a brief analysis of the singer's ability to perform takes place. A valued chorus member is one that does not need to rely on those around him or her to sing the pieces during the performance. Although balance must be maintained, a personal focus on the part one is singing should exist. To successfully complete this task the singer must

[8] Janice N. Killiam, *The Relationship Between Sightsinging Accuracy and Error Detection in Junior High Singers*, The Journal of Research in Music Education, © 1991, volume 39, #3, pp. 216-24.

be confident in his or her own ability as well. Our opinion concurs with Dr. Elmer Thomas', the director of choral organizations at the University of Cincinnati's Conservatory of Music, opinion:

> "The technical skills of reading must be integrated with musical expression and structural understanding. Natural dynamics (crescendo and decrescendo) are integral to the shape of the melody, while articulation (staccato, legato, marcato, etc) provides character for the musical line; both are absolutely essential to musical expressiveness... Lastly, belief in the abiltiy of the student to learn-and the student's belief in his own ability to succeed are crucial to success."[11]

A competent singer must also not rely on accompaniment to successfully sing through an entire song. One should realize that even without valves, keys or strings a voice is an instrument.

> "The singer [is] an instrument with the unique ability to fuse words and musical tones... [But what is an instrument?]. An instrument may be defined as any mechanism that produces musical sounds."[12]

It is not expected that even a trained sight-reader be able to sing a piece without flaw before ever hearing it played, as stated by Michael L. Friedman below:

> "Through unusual gifts such as absolute pitch or photographic memory, a few students find themselves able to take a melody by Schoenberg in dictation or memorize it. The rest are relatively helpless when confronted with this sort of task."[13]

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[11] Paul Cooper, Dimensions of Sight Singing-an Anthology, © 1981, Longman, Inc., pp. xiv.
[12] Roger Kamien, Music:An Appreciation, © 1994, New York.
[13] Michael L. Friedman, Ear Training for Twentieth Century Music, © 1990, Yale University Press, pp. xxi.

Our opinion is shared by Dr. Friedman in that it is impossible to sight sing a piece perfectly in its entirety, but it is helpful to discern prevalent melodies and rhythms within the piece before hearing it played. The ability to perform a piece without the aid of a piano or other accompaniment is especially necessary during an a cappella piece. Although most a cappella pieces are learned and practiced with accompaniment, the final product must be independent at the concert or performance. Through the benefit of sight-reading skills, a vocalist is much less likely to depend on hearing the tune played.

Another benefit when learning to sight-read is past experience with an instrument as well as with voice. Students with a background in another instrument will benefit from knowing the basics of music theory such as meter, intervals and knowing how to read a music staff. In addition, it is most helpful for a student of sight-singing to have past vocal experience, either in a choir or in private lessons. This point is made well by Demorest and May in their 1995 article in the Journal of Research in Music Education:

> "Years of school choral experience clearly was the most important background variable. Piano experience played a more important role than did other types of private lessons. [Instrumental lessons as well as voice lesson] also played significant roles in predicting sight-singing success."[14]

Past instrumental and choral experience both contribute to the success of the musician and enhances his or her perception of the parts around them. This perception is vital to the overall choir sound and balance. An accomplished sight-reader is not only aware of his or her own part, but also locates parallels between the other parts in the song with the

[14] Steven M. Demorest and William V. May, Journal of Research in Music Education, volume 43, #2, Summer 1995, pp. 160.

one that he or she is singing. By being able to draw out parallels in the music, it becomes easier for a vocalist to sing his or her own part correctly. Recognizing when lines are in unison or at a familiar interval, whether on a note or for the whole melodic line, makes the performance more accurate.

The last element that makes up overall musical ability is an education in correct posture and vocal technique. Major points one should recognize include breathing, body support, voweling, consonants and etiquette. There are numerous components that one should remember, however, every detail is equally important. It is not expected that one retain every aspect the first time they are presented, nevertheless, recollection comes with time.

> "You will not remember all of this information at once in rehearsal, but if you work on your music and vocal technique at home, you will gradually find yourself improving vocally and enjoying singing more."[15]

Our research enabled us to further concede the importance of musical knowledge and technique in augmenting one's musical ability. The enhancement of competency in sight singing will give a vocalist sustenance for his or her collective performance.

> "It is to be emphasized again that sight singing is not an exclusive domain of the voice student, but rather an essential requisite of musicianship for all serious practitioners of the art."[16]

[15] Ruth Cooper, BA., MA in Music, member National Association of Teachers of Singing, Voice Master Class.
[16] Paul Cooper, Dimensions of Sight Singing-an Anthology, © 1981, Longman, Inc., pp. 2.

Chapter 3- The Chamber Chorale at Notre Dame Academy in Worcester, Massachusetts

The group that we taught was the Chamber Chorale at Notre Dame Academy. Notre Dame is a private, catholic school for girls in Worcester, Massachusetts. The Chamber Chorale was formed by its director Kallin Johnson in 1992 and was created because of a need for a more select group to form out of the larger, older and growing ensemble, the Concert Chorale. The Chamber Chorale has consisted of fourteen to sixteen members in the past and had thirteen members for this 1998-1999 academic year. They generally sing in four-part harmony, breaking the group into the voice parts soprano I, soprano II, alto I and alto II. Typically their repertoire includes madrigals, folk songs, classical pieces, carols, ballads, and jazz/swing pieces. Ordinarily, most of their performances are performed a cappella.

This year the group practiced and/or performed the following pieces of music:

- *Bouree for Bach*, J.S. Bach, transcribed by Bennett Williams
- *Sleepytime Bach*, J.S. Bach, arranged by Bennett Williams
- *Bach, By Jove!*, J.S. Bach, arranged by Bennett Williams
- *Break forth, O beauteous, Heavenly Light*, composer unknown
- *Sicilian Bagpipers' Carol*, Katherine K. Davis
- *Love is a Rain of Diamonds*, lyrics by May Swenson, music by Gwyneth Walker
- *Choose Something Like a Star*, lyrics by Robert Frost, music by Randall Thompson
- *As Fair As Morn*, John Wilbye

- *Habanera*, from *Carmen*
- *South African Suite*, arranged by Henry Leck
- *Little Drummer Boy*, by Harry Simeone, Katherine Davis, and Henry Onorati

The Chamber Chorale puts on many performances in the community. For the past few years they have been performing at the Festival of Trees, a holiday celebration in December in the Worcester Common Fashion Outlets. They have performed at the Worcester County Bar Association's Law Day on May first every year. During the day's festivities the group sings at the naturalization ceremony in front of the Courthouse and at the concert that takes place at noon in Mechanics Hall. The girls also sing on a few separate occasions through the year at area nursing homes such as Worcester State Hospital and Fairlawn Hospital. The yearly academic schedule consists of school concerts and joint performances with choruses from St. John's High School. This makes for a hectic performance schedule.

Notre Dame Academy has numerous musical ensembles. There exists a small orchestra, a large concert band with members from St. John's Catholic School for Boys in Shrewsbury, Massachusetts, many small ensembles including a percussion ensemble and a guitar ensemble, and three choruses: the Concert Chorale with fifty-six singers, the aforementioned Chamber Chorale and an a cappella group with nine singers. To be a part of one of the smaller groups a student must be a member of one of the larger main groups which is concert band for instrumentalists and the Concert Chorale for vocalists. All of the musical groups at Notre Dame Academy are under the direction or assistance of Kallin Johnson.

As mentioned before there were thirteen singers in the Chamber Chorale this year. Seven of the singers were returning members and there were six new girls. The group consisted of all upperclassmen. For the Chamber Chorale the director selected four first sopranos, four second sopranos, two first altos and three second altos. As a part of our research we created a survey that each member filled out. In the surveys the girls listed a variety of reasons why each of them auditioned for the group. When asked, all the girls stated that they wanted to be in the Chamber Chorale because they liked to sing. Most wanted to be in the group to have fun, because it looks good on their college resumes, and to learn more and challenge themselves in music. In addition, a few girls mentioned they joined to be with their friends, to make new friends, because the director suggested that they should audition, and because it looked like a fun group. Although very talkative during rehearsal, it seemed like all of the girls enjoyed singing and wanted to be there and all of them stated that they were willing to work to improve themselves and the group.

In the surveys that we handed out the students informed us of their past musical experience. All of the members of the group had past choral experience and eight of the thirteen had some theatrical experience. In addition some of the girls had formal training in other instruments such as piano, cello, clarinet and percussion. Five members had taken private voice lessons. There existed a few rare talents in the group: two members started a choir together, one had been teaching singing to young children for two years and three had received some type of award for singing. It was music to our ears that a few of the students planned to continue studying music in and after college, even if informally.

Only one girl in the group had ever worked with or even heard of an educational music program on the computer. The program she worked with was *Claire*, but stopped because she became annoyed with the computer. Although none had past experience with computer music programs, they were all willing to learn from one.

None of the students knew how to sight-read music. Two of the members had taken music theory courses, and the members with past piano experience were, with a starting pitch, able to deduce some of the score without hearing it played. Most of the students displayed a lot of interest when we mentioned we would be teaching some sight-reading skills.

After some observation, we gained an idea of the behavior and attitudes of most of the group. Because Notre Dame Academy is a private school there was more freedom for the girls to disobey and also for the director to carry out punishment if they acted up. Often if the girls were too talkative or disruptive they were simply asked to leave the rehearsal. The director exercised his authority through the grade he administered. Since we were not teachers or even faculty at Notre Dame Academy, we had no control over the students, and no permission to punish them. We had to earn their respect. This was difficult with some of the attitudes present, especially from the second soprano section. All of the girls in the group chose to audition and were present by choice, but some acted as if they were being forced to participate. The rest of the choir was generally quiet, respectful and attentive.

Chapter 4-Procedure:

In preparation for this project with the Chamber Chorale of Notre Dame Academy, we had to decide what exactly we wanted to do with the students and what we hoped to accomplish. Over the course of three of our terms, we hoped to teach the girls how to sight-read music better. First we realized that it was impossible for us to teach them to sight-read perfectly in the amount of time allotted to actually teach the students. However, we wanted to cover the basics necessary for them to be able to understand the concept of sight singing. We hope we developed their interest in the subject and encouraged them to use the information, skills, and computer programs we have shown them on their own.

Before entering the classroom we wanted to be as prepared as we could be to efficiently use the class time we had that day. To do this, we made up a detailed lesson plan prior to each visit. This agenda was written to cover more time than we were expected to have to be sure we always had something for the students to do. Stated within each plan was an outline of what we were going to execute each day, including warm-ups, exercises, and learning activities, in addition to any other questions we may have had for the students or the director. Our Lesson Plans can be found in Appendix A.

One part of our lesson that we worked on was ways of keeping the students focused. Being high school girls they tended to be talkative and have very short attention spans. When we asked Dr. Robert Eaton, a choral director at Algonquin Regional High School, what we could do to keep the students' attention and keep their interest, his response was:

> "How to get [students] to stop talking!!!??? Mia, weren't you in high school? If I knew the answer to that I'd be rich and famous! Authority doesn't seem to mean much in those situations. Try to keep them busy and engaged. Move quickly from one item to another. Keep them on their toes by frequently asking them questions about what others are doing etc.. Insist on common courtesy and respect. No easy answer."[17]

It was our responsibility as teachers to try and maintain their concentration on the task at hand. To do this, we devised quick-paced, interactive, interesting and fun exercises that kept them focused. A prime example of this is the warm-ups we chose. We asked the girls what warm-ups they enjoyed doing, which ones they found boring and monotonous, and which they find uncomfortable. This was done primarily by trial and error. For example, we experimented by asking them to get in a circle and give their neighbor a backrub while singing. In our own choirs, this exercise has become a favorite. However, when asked a few days later, the girls told us that they were uncomfortable doing that exercise and we immediately expunged it from any future lesson plans. We made the girls aware that we would remain open to any objections or comments on anything we presented to them, but requested that they try it out first.

When we taught the class and worked on the pieces that they were singing with their director, we generally tried to work with them without the use of the piano. Since all the pieces they sing are a cappella, we came to the conclusion that it would be best if they practiced the pieces without becoming dependent on accompaniment. However, if needed, we both had the ability to play individual parts if a student was having trouble or the piece was new.

[17] Dr. Robert Eaton, Choral Director at Algonquin High School

When we taught the students and worked on their music, we instructed them without the use of the piano. We also picked out parts of their music in order to review the rhythms with them. We hope that this enabled them to grasp the difficult rhythms in their music as well as whatever exercises were presented to them. They can take this knowledge on to helping them learn to sight-read.

To further aid our teaching we utilized the computer music program available at the high school, *Practica Musica*. We used this program to teach the students basic music theory such as pitch, rhythm, and intervals. There are different exercises under these three main categories. Some we hoped to use included pitch and rhythm matching, pitch and rhythm reading, and interval playing, spelling and ear training. In the matching exercises, the computer plays a rhythm, pitch or interval, depending on the exercise, and the player is required to match it on the virtual keyboard. This will familiarize the students with reading the staff and the notes themselves, learning the notation for rhythm, and learning intervals. In the reading exercises, the computer plays a melodic and/or rhythmic line while a metronome plays, and the student must reproduce the line with the correct notation. In interval spelling, the computer supplies a note on a staff and asks the student to indicate on the staff a certain interval above or below the given note. In interval ear training, two notes are played simultaneously and the student must identify the interval (i.e. major third, perfect fourth, etc.). We believed that these exercises would enhance the students' knowledge in addition to placing them all at a similar level of experience.

We hoped the students would apply the knowledge they have gained in music theory by using *Practica Musica* to what they are working on in the Chamber Chorale.

In addition to teaching the students the music they sing with their director, we also had other exercises specifically designed to develop individual sight singing skills. Examples of these exercises can be found in Appendix C and E. We taught them the basics and with each exercise we drilled them to get them used to sight-reading a piece on their own. When sight singing, it is important to remember a few preliminary steps.

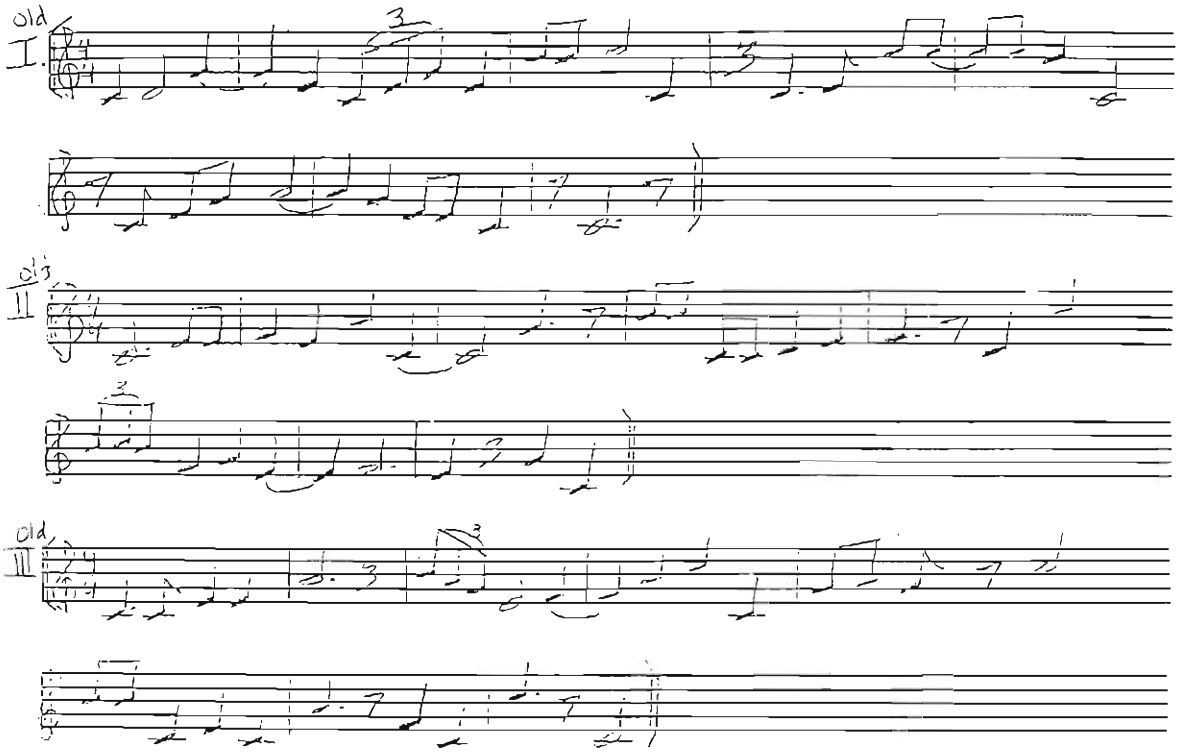
1. Scan the piece
2. Consider: clef, meter, key signature, basic mode and range
3. Get the beginning pitch
4. Decide solfeggio system (optional)
5. Establish a basic pulse and beat for two full measures before beginning to sing.[18]

Once we began the exercise, it was important to not break the rhythm by stopping to make corrections. Continue through the piece until the end, even when mistakes are made. After the exercise is sung in its entirety, one should go back and work on fixing errors, practicing them several times. Also, don't play the excerpt through before attempting to sight-read it. By playing the piece for the students, they would not be using their sight-reading skills.

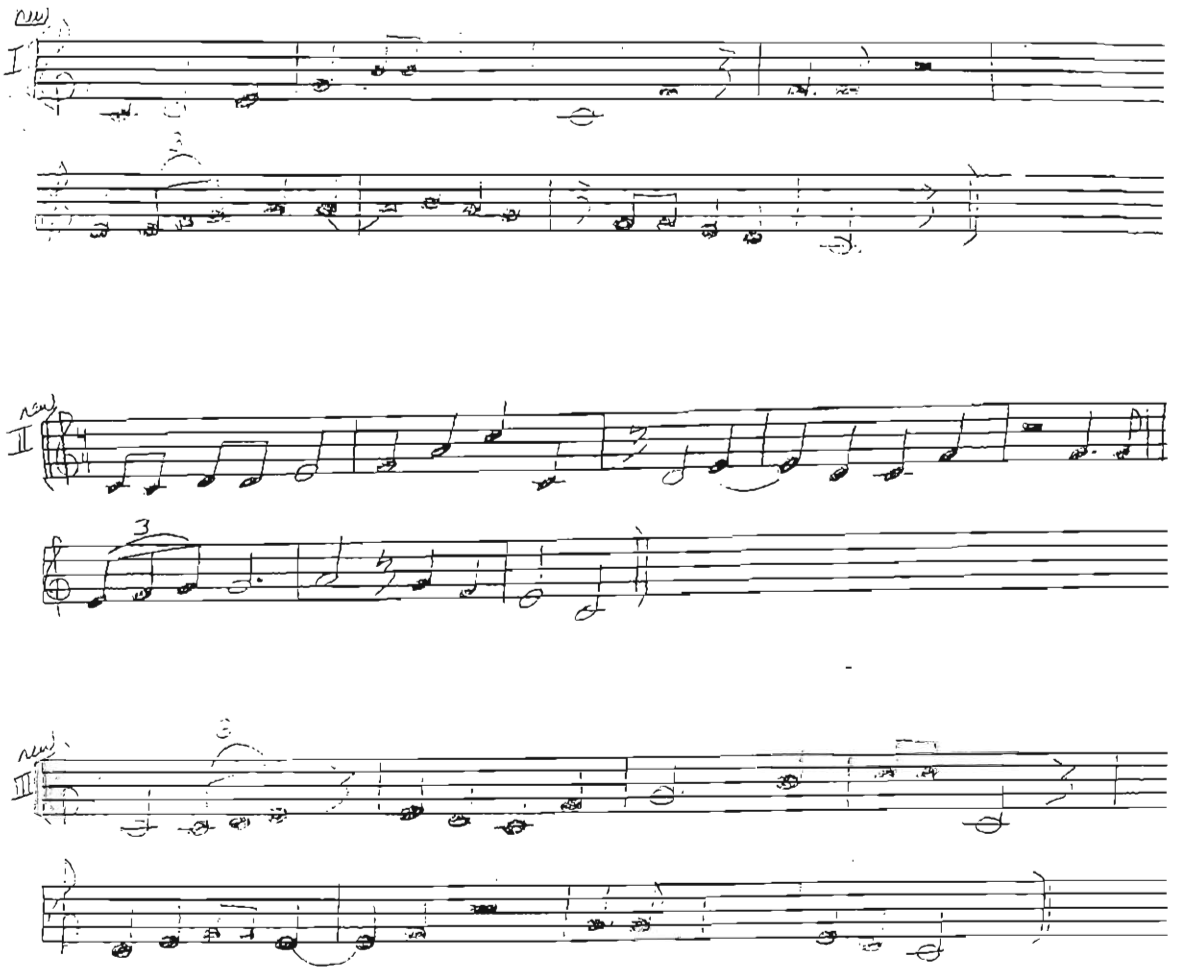
> "Do not stop to make corrections. Stopping breaks the flow of rhythm and leads to a halting and insecure performance...Using an instrument will lead merely to rote memorization and will impede your learning of sight-singing skills."[19]

[18] Paul Cooper, Dimensions of Sight Singing-An Anthology, Longman, Inc., ©1981, pp. 2.
[19] Arnold Fish and Norman Lloyd, Fundamentals of Sight Singing and Ear Training, ©1964, Dodd, Mead & Co., pp. xi.

The test we used to evaluate the members of the Chamber Chorale was simple and had many possibilities for variation. We created it ourselves, made multiple forms, and adjusted it to any level we chose. This form of analysis was used on non-music teachers taking a course in music education.[20] Of all the musical evaluations we have seen during our research, we felt this one would give us an accurate view of how well the girls could sight read. Below is an example of the first test we administered and found to be too difficult for us to sufficiently evaluate the students. This is followed by the second test the students were given which we felt would effectively assess their sight reading skills. Also, both of these tests can be found in Appendix F and G.:



[20] Jane W. Cassidy, Effects of Various Sight Singing Strategies on Nonmusic Majors' Pitch Accuracy, *Journal of Research in Music Education*, volume 41, #4, 1993, pp. 293-302.



The test-takers were given these melodies to sight-read. A beginning pitch was chosen, preferably a higher one to keep the voice high (it was noted that the test takers had a tendency to sink very low into their range). They were then given the meter and a time signature (i.e. a quarter note will be equal to one beat). From there, the test-taker sung the melody to the best of his or her ability. One point was credited for each correct note, each correct interval between notes and each correct rhythm. Therefore, if the melody was only three notes long, for example C-natural to D-natural to E-natural (Do-Re-Mi), each for a duration of one quarter note, then a total of eight points is obtainable. Three points are available from pitch accuracies, two points from the two intervals (from C to D and D to E), and three points are attainable if all three notes are held for an equal duration of one beat. We felt this was a well-standardized test because it did not discriminate towards any singer in any way since no one had heard any of the tunes that s/he were tested on. We also felt that we could fairly judge the results of the evaluations by tape recording each test and reviewing the tapes. It would have been very difficult to assign points during every performance. We planned on administering this test both before we began teaching the sight-reading lessons and near the end of our time at Notre Dame Academy. However, the first test we made was too difficult and so we devised a new one. This gave us the opportunity to test them only once, before they had all the basics of music theory and had worked with *Practica Musica*. The results of this test can be found in Appendix H.

As student teachers we had to work on gaining the students' respect. Although there was only a small age gap between us and the students, we had to keep in mind that we were not there as their peers but as their teachers, even if just for a short time. This

did not mean that we could not be friendly, we just could not let things get too personal. In the meantime, sharing everyday stories, especially in reference to our singing experiences, were extremely helpful in building our relationship with them during their learning process.

Chapter 5-Results:

In the following paragraphs, we will explain the results of our time spent teaching the Chamber Chorale. We will explain the reception and success/failure of each of our lesson plans, and any difficulties we encountered. A description of the group members and their response to our teaching will also be included.

Through the teaching of our lesson plans, we hoped to familiarize the members with basic concepts of music theory, general knowledge of singing, and basic elements of sight singing. These lesson plans can be found in Appendix A. In our first lesson plan we made the girls more familiar with our goals and purpose for being there, as well as teaching them common warm-ups we planned on using in the future. We observed them on previous occasions to get an idea of the group and their behavior. The same behavior patterns, discussed later in this chapter, were present on our very first day. The girls seemed somewhat receptive to our presence and displayed interest in what we were there to teach. We worked on different warm-ups in class and found what they liked and disliked. For example, when we attempted to have them give each other backrubs in a circle while warming up, they informed us they did not feel comfortable doing that and we abruptly stopped. However, when given the Bee-a-bay warm-up, they were quite responsive and enjoyed using that as a warm-up exercise.

In the following lesson plan, we taught the group proper posture and vocal techniques. Since Heather was unable to attend, Mia went without her but was accompanied by Karen Hirst a soprano I at WPI. Karen was asked to join Mia because of her powerful soprano voice that we felt would display proper techniques to the sopranos at Notre Dame. She was also helpful in displaying the possible voice range any singer

should possess. We handed out the Voice Master Class sheet by Ruth Cooper to the few students present. This sheet can be found in Appendix B. The students were quite responsive and all the members present reached a high G after proper warm-up. An interesting occurrence we noticed towards the end of this lesson, was the astonishment of the altos at the fact that they could sing so high with power.

We attempted to teach Lesson Plan 3 and test the members on February 1st. While Mia was introducing the concepts of rhythm to the girls, Heather took one student at a time into a room so none of the other students could hear the test being given to them. This first test can be found in Appendix F. A concern of most of the girls was the possibility of other students and/or their director ever hearing the tape. We assured them that we were the only people who would hear the tape and the only reason we were recording them was so their skills could be properly evaluated. There were three different melodies to choose from, all of equal difficulty. The student was given a starting note and meter and asked to sight-read the melody while we tape-recorded them. We found most of the students paid no attention to meter, focusing only on hitting the correct notes.

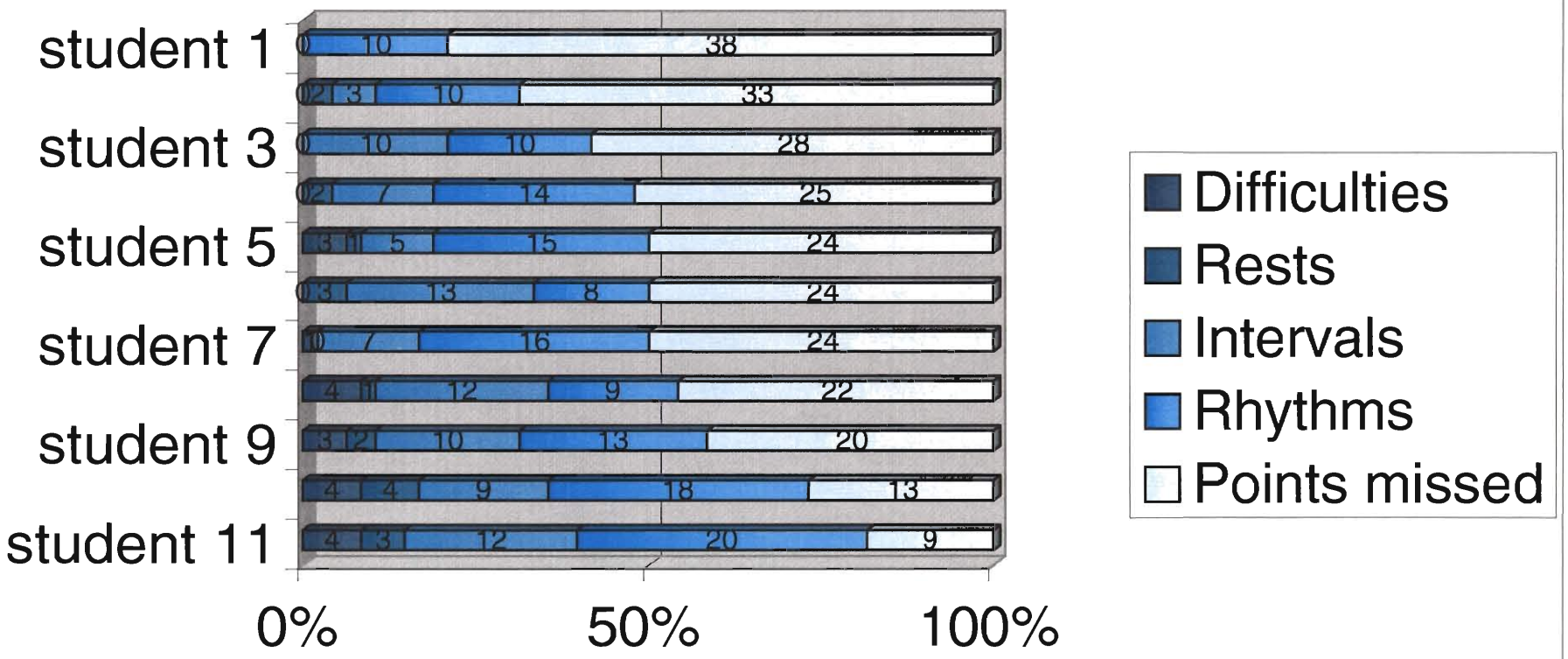
When teaching rhythm, Mia found the majority of girls were not familiar with basic concepts of rhythm including simple tasks such as identifying a quarter note and a half note. It seemed this was the first lesson in rhythm for the most of the members. When all the girls were through testing, Heather joined Mia in reviewing the rhythm exercise sheet, which can be found in Appendix C. About half of the girls seemed responsive and actively participated in reading the sheets. By the end of the lesson, this half seemed to have a general understanding of basic rhythm. We repeated this lesson

again on April 30th with very similar results. Similar to how we ran the previous lesson, we tested them again while reviewing rhythm.

The reason we administered the test a second time was we found the first test to be too difficult for the students. We had assumed the girls knew more about rhythm and interval recognition than they actually did. As a result, we decided an easier test was necessary to properly evaluate the girls. The new test had smaller intervals, simpler rhythms, and fewer difficulties such as dotted notes, rests and tied notes. This second test can be found in Appendix G. Unfortunately, the girls were less responsive than they were on the first test because they had already been through the procedure once and voiced their discomfort and detestment of any tests. However, all the students present participated in attempting the second test. The results of this test can be found on the following page, and in Appendix H.

On April 1st, we attempted to teach them Lesson Plan 4. We successfully instructed them on how to read notes on a staff in bass and treble clef, acronyms to remember the order of the notes on the staff in either clef, the order of sharps and flats, and how to identify key signatures. Most of the girls did not know how to read a music staff and could not locate middle C on the piano. The students were fairly responsive, and one student even made up an acronym for the notes on the staff lines of the bass clef on her own (**G**ood **B**oyfriends **D**on't **F**ool **A**round). We quizzed them for approximately ten minutes and then they began to lose interest in the dry subject. We anticipated this and were prepared to teach them a musical game known as "Human Beat Box" where each member imitates a percussion instrument. First, a meter is established, we had one of the girls who did not want to be an instrument clap or pound out a steady beat. One by

Sight-reading Test Results



one we had the girls join in with whatever sounds they could think of. We also stated that the girls (only two of the members) who did not want to participate could observe quietly. At times, we would have to supply the girls with sounds because they were too nervous or unsure of making a sound themselves. Eventually, all of the members participating were creating unique and fun sounds or patterns. The game went on successfully for the remainder of the class period, approximately twenty minutes. We decided this was a good attention-getter if they were getting distracted, as well as a good way to review rhythm.

On April 14th, we reluctantly had to combine Lesson Plans 5 and 6 to prepare the members for the future use of Practica Musica in the following lesson. We reviewed all key signatures and treble and bass clefs from Lesson Plan 4. We were pleased to see that most of the girls had retained the information taught at the last lesson. In fact, two of the girls mentioned that they now understood the concepts that were confusing to them the last time we taught it. Much to our dismay we did not get a chance to ever teach them minor key signatures. After the brief review, we moved on to teach them all intervals and intervalic associations for most major, perfect and minor intervals. We handed out the "Intervals and Notes" sheet that contained all intervals under and including an octave, key signatures, acronyms for bass and treble clefs and the list intervalic associations by Marc Rubinn. The "Intervals and Notes" sheet can be found in Appendix D.

First we showed them how to identify major, minor, augmented, diminished and perfect intervals. Next, in an effort to prepare them for the computer lab, we played the various intervals on the piano and had them try to distinguish between them. We anticipated the dryness of this lesson and despite the side conversations and lack of

interest, we felt the need to continue so they would be somewhat prepared for *Practica Musica*.

During this lesson we discovered one of the students had perfect pitch. When playing intervals on the piano, she was continuously naming the notes. We changed the octave and asked her what notes we were playing and she named them correctly again. To make it more difficult, we played a bunch of jumbled notes so she wouldn't remember the previous pitches and again asked her to name the notes played, and again she answered us correctly. When told she had perfect pitch, she had never even heard of it. We explained to her what perfect pitch was and how rare it was, but we seemed more excited about it than she did. She often didn't sight-read; she just thought of the notes and sang them rather than thinking of intervals. Even though she could distinguish what pitches went with the notes, she did not have a basic understanding of rhythm or fluent basic skills of reading music, such as key signatures and clefs.

We were prepared to teach Lesson Plan 7 on April 16th, which was the application of *Practica Musica* into the classroom. Upon our arrival to the classroom we found that there was no computer. This was a surprise to us since the director had suggested we prepare the girls to work in the computer program that day. We decided to review more intervals and key signatures. After less than ten minutes of teaching they all completely lost interest. We quickly learned this was because this was the last class of the day before their spring vacation; essentially we were the only things standing between them and their break. As a result we decided the best thing to do was to play "Human Beat Box". The majority of the girls participated fully in the game, even those who don't usually pay attention and are quite talkative. They began to start a "Beat-Box" for *Ice-Ice-Baby,* a

popular song from a few years ago, and two of the more talkative members rapped the lyrics over the beats. We believe that even some of the shyer girls had fun that day.

Our second-to-last lesson, presented on April 30th, we were able to use *Practica Musica* with them for the first, and only, time. The girls circled their chairs around the single pod computer in the center of the classroom and we completed the *Interval Ear Training* exercise as a group. The intervalic associations were a good aid in their ability to identify the intervals correctly. They would often answer with the association rather than the interval. For example, instead of stating that a fourth was played by the program, their answer would be "Here Comes the Bride" rather than "a perfect fourth".

The students were reasonably attentive throughout the exercise and were excited when it had been successfully completed. After the class period ended, one of the girls asked where and how she could get access to the program on her own. We felt that this was proof that we were successfully reaching the students.

Our final encounter with the Chamber Chorale was on May 6th. We decided to use a fun application of what we had taught in the previous lessons. In this class period we hoped to fully sight-read a popular three-part a cappella song, *I Can't Help Falling In Love With You*, by UB40 and arranged by Julie Roberts. This "sight-reading" sheet can be found in Appendix E. We began by dissecting the rhythms and clapping out each individual line. We repeated the more difficult rhythmic phrases to ensure there was no confusion for the students. Next we started to sight-read the alto line followed by the soprano I line. We saved the soprano II line for last seeing as it was the melody. We would have liked to combine all three parts and to have sung them together, but their director needed to review a few pieces for the concert that evening. There was one song

that they did not feel comfortable singing that evening so they asked us to use the remainder of the class period to teach the song to them. They left the class feeling more confident about the song and thanked us for our assistance.

It was during this last lesson that we really noticed some improvement in the students sight-reading skills. In the prior rhythm lesson, Lesson Plan 3, we had noticed some off-beat clapping and some confusion for some of the girls when attempting to clap the rhythms in the exercises. The members were able to clap out the rhythms on the sight-reading sheet without much help from us. In addition, the students were able to identify every interval and sing all of the 2nds, 3rds, 4ths, and 5ths present in the piece. They were not able to sight-read the entire melodic line without assistance, however, there was much improvement from the earlier sight-reading tests.

The group of girls was receptive and polite to our presence in their classroom. During our time there, we found at least half the group, approximately seven of the thirteen members, were constantly paying attention, listened to what we were teaching and were appreciative of our lessons. Of these seven, three actively participated with constant feedback and questions. The other four were attentive but not extroversive. Despite their quietness, they displayed an understanding and an interest in what we were teaching.

Of the remaining six members not aforementioned, four girls were interested and responsive at times but were extremely talkative. Three of these four members displayed a respect for our presence and purpose in their classroom and were often helpful by informing us of the general information about the Chamber Chorale. For example, favorite warm-ups of the group, reasons for absences of some of the members, concert

dates, etc. We found the last two members to be completely unresponsive and uninterested in what we were doing. One of these girls was silent and completely indifferent to our lessons, whether we were doing our own teaching, were going over their own music, or were trying something fun like Human Beat Box. The other unresponsive member was extremely talkative, inattentive, and unhelpful, often distracting those around her.

Despite all of this, we found none of the girls to be offensive, rude, disrespectful, or needing disciplinary action of any sort. They were a terrific group of girls we enjoyed having as students. It was a pleasure working with these youths and knowing that we aided them in learning some of the basics of music theory, hopefully sparking further interest in this area.

Overall, we feel the girls received us well and respected us as musicians and peers. When their director did not have time to review a piece of music with them, or they did not feel a piece was ready for performance, they would often ask us for help going over vocal parts. They felt comfortable enough with us to vent their fears and frustrations as a chorus about musicality, upcoming performances, and personal disputes within the group. A gesture of their respect was their voiced desire for everyone to behave when they knew our advisor would be coming in. Although some of the usual conversations occurred even with our advisor there, the girls would inquire if their behavior was acceptable after he left.

Another way we knew they appreciated us being there was their repeated queries about our presence. If seen in the hallway before class they would amiably ask if we were teaching them that day and if they would need the sheets of exercises we had made

and handed out to each of them. After class they would ask when we were returning to teach them again. Also, they would note long absences, due to conflicting vacations and concerts. After using *Practica Musica* with them, a few of the girls asked if they would be able to get access to the program on their own. All of these instances made us feel as though we had sparked some interest in the subject we were teaching. One of the more interesting things we discovered while teaching this group was that one of the girls has perfect pitch, as mentioned previously.

A quantitative post-test was not performed on the girls to analyze their desired improvement. We feel that after only a few thorough lessons with the students it would be unfair to expect any drastic changes in their sight reading ability. On the other hand, based on our observations, we feel that the students gained considerable knowledge in music theory and the basics of sight singing.

Chapter 6-Conclusion:

There were many obstacles to overcome in this project, as in any large project. We feel that we not only handled each obstacle stealthily but also managed to conclude this undertaking with a successful final product. Throughout these three terms we were successful in earning the group's respect and friendship in being considered both their peers and their teachers. We had the privilege of working with a great group of students.

The circumstances of the Chamber Chorale being a select choir, meaning all the members had an interest in music and a desire to be there since they were there by choice, aided in the area of participation and curiosity in the subject matter. We believe the students knew that what we were teaching would improve their singing ability and musical knowledge and therefore they were cooperative and responsive. This was a benefit to us as teachers, the first roadblock was already overcome.

Being a select choir, all the members had musical talent, and about half were outwardly confident in their ability. Since the Chamber Chorale is only a high school choir, it is normal to expect that the other half of the students were timid when singing. The extroverted half of the choir was helpful in demonstrating our warm-ups, exercises, teachings and games. The more introverted members were attentive but left us at a disadvantage when trying to obtain the group's participation as a whole.

About half of the group plans to study music informally after high school, but none of the members expressed an interest in pursuing music as a career. Singing was something that they enjoyed, but did not wish to study. This led to difficulties in retaining their curiosity in the subject matter.

Other limiting factors in this project include:

1. Unpreparedness of the group for upcoming concerts—we often took time out of the lesson we were scheduled to teach to review music.
2. Class cancellations
3. Capricious class schedules—Notre Dame Academy has a rotating schedule which often conflicted with WPI's steady class times.
4. Lack of time allotted to teach

During our teaching we came across one exercise that we feel we should mention to other instructors needing a learning aid or a means of retaining their students attention: the "Human Beat Box". We found this game to be extremely useful and fun for the students. It not only allows them to be creative, but also practices their rhythmic techniques. The more outgoing students flourish and even the generally non-responsive students enjoy participating. This is accomplished by the use of simple rhythmic patterns as well as more complicated melody lines and syncopation. It is also beneficial to the shy student because there is no incorrect contribution.

Overall we accomplished a great deal in the time allotted for us to work with the girls. With continued practice, we feel the girls could not only retain the information we taught them, but also grow on it. This was a successful project and we achieved most of our goals.

Appendix

A. Class lesson plans

B. Voice Master Class Sheet by Ruth Cooper

C. Rhythm Drills

D. Intervals and Notes

E. Sight-reading

F. Test 1

G. Test 2

H. Graph of test results

A. Class lesson plans

Lesson Plan 1
November 13, 1998

Objectives: By the end of this lesson the student will be familiar with the purpose of our presence in their classroom and also some of the warm-ups we will be using in the future.

I. Ask them what time class ends!!!!
II. Give out questionnaire (~first 15 minutes of class~12:40)
III. Have them go around the room and say their names and what part they sing (3 minutes~12:43)
IV. Talk to them about what we are going to try to do with them with sight singing, introduce the concept of using computers, etc. (~5 minutes or less~12:48)
    - Different warm-up exercises
    - Basic theory and rhythm
    - Being able to support your own part, especially through sight singing
    - Help them blend with each other (we may move you around at a later date)
    - Introduce new computer software that will (hopefully) aid in their learning of the pieces
    - Posture and vocal techniques
V. Take any questions they might have (~5 minutes or less~12:53)
VI. We're going to start with something fun, at least we think so, so we'll teach them some warm-up exercises (rest of class-till ~1:05 or till when class is over)
    - Meeeeee-a-meeeeee-a...with backrub chain in circle
    - Hand gesture (following our hands with their vocal movements)
    - Hand out sheet with Bee-a-bay and Piccolo Mini
    - 1,121,12321...123456787654321,1234567654321...with snaps on top number
VII. Questions for Kalin:
    - When do you want us next? A whole mother load of dates.
    - Can we have copies of every piece you're doing? What will you be working on the next time we come in?
    - When's the next concert? What will they be singing?

Lesson Plan 2
November 19, 1998

Objectives: By the end of this lesson the student will know the proper posture and vocal techniques necessary to be a good vocalist.

I. Say hello and explain that we're going to work on teaching them some posture and breathing exercises as well as rhythm-bear with us if you know all this, there may be people that are kind of unsure and so it's so we can have everyone on the same level.

II. Ask them what pieces they're working on.

III. Posture and vocal technique

- Backrub circle-while doing it, do the Ssssss exercise, then switch sides and do it again.
- Hand out sheets Ruth gave to Mia
- Get them to know where they're breathing (bending over, sit up straight, realize how it feels on your back and ribs)
- As they roll up, tell them where their head, shoulders and feet should be (imagine a string attached to your head, boobs on a platter...)
- Sounds from tummy when you inhale, making a sound should be straight from your stomach. With ah, two fingers should fit in your mouth, go over a-e-i-o-u, keep mouth same just lips move.
- You should be able to sing up to a High G (open mouth and support). Be ugly loud, talk about Karen and Steph-sops were meant to be heard, they usually have the melody and their voice carries more because they're the highest part, Mia tell joke.

IV. Do some warm-ups (Bee-a-bay and Piccolo Mini) BE CAREFUL OF POSTURE AND TECHNIQUE!

Lesson Plan 3
February 1, 1999 and March 30, 1999

Objectives: Students should be able to identify, with practice, quarter, half, eighth, sixteenth, and dotted, whole and triplet notes as well as tied notes and rests in any time signature.

I. Rhythm-they can sit

- Get a stand, hand out previously made exercises-basic notes, quarter, half, dotted half, whole, sixteenth (and explain other tails, etc.), triplets and rests. There will be an explanation on the sheets.
    - a) Go over time signatures
        - ➢ Explain the top number is how many beats per measure and the bottom number is what note gets the beat. Explain that putting a 1 over the bottom number gives you the note that gets the beat
        - ➢ Write the most common time signatures on the board such as: 4/4, ¾, 3/2, 2/4, 2/2, 6/8
        - ➢ Write more difficult time signatures on the board and explain (only if they understand previous time signatures). Such as: 12/8, 6/4, 4/16, 7/4, 5/4, 9/4 and tell them how to break them down. For example,
          5/4 = 1-2-1-2-3
          9/4 = 1-2-3-1-2-3-1-2-3 or 1-2-1-2-1-2-1-2-3
          7/4 = 1-2-3-1-2-3-4
    - b) Go over bpm (120, 60, etc.)
        - ➢ Tell them that the bpm number indicates the speed of the piece. Give examples of bpm = 60 means that there is 1 beat/sec and bpm = 120 means that there are 2 beats/sec. Explain to them how to figure out the bpm with a watch.
- Do exercise sheets
- Ask them if they have any questions on rhythms in their pieces, be specific, no quarter notes etc.
- Run pieces used in exercises on "da-da"
- If time, try running pieces with no piano.

II. If we need to fill time:

- Explain and demonstrate the "Human Beat Box" (vocal percussion). Explain how to make certain sounds with your mouth: bass drum, high hat, cymbal, snare drum, swing sound, melodic sounds, etc.

Lesson Plan 4
April 1, 1999

Objectives: The student will be able to identify a key signature, sing the scale of any key signature, and have the understanding of major and minor keys.

I. Write a sharp and a flat on the board and ask them if they know what it does to a note.
   - Write out the keys of C major, F major, G major, and E*b* major. Explain the fixed "doh" and treble and bass clefs.
   - Explain how to figure out the key signature from the sharps and flats present (second to last flat/half step up from the last sharp).

II. Explain major vs. minor keys
   - Explain the concept of complimentary major/minor keys
   - Explain that C major = a minor, and F major = d minor
   - Play a I chord in the key of C major, and a I chord in a minor and show them how one is happy and one is sad sounding (major sounding/minor sounding). Do the same with an F major I chord and a d minor I chord.

III. Write out intervals on chalkboard: 1^{st}, 2^{nd}, 3^{rd}, 4^{th}, 5^{th}, 6^{th}, 7^{th}, 8^{th}, major, minor, and perfect
   - Ask them what they do/don't know about intervals. Instead of telling them, let those who know explain.
   - Ask, for example, does anyone know what a whole step is or what is a perfect 5^{th} above C? Let the students explain.
   - Explain some common songs to remember intervals.

Lesson Plans 5&6 (combined)
April 14, 1999

Objectives: By the end of this lesson, the students will be able to sing 2^{nd}, 3^{rd}, 4^{th}, 5^{th}, 6^{th}, 7^{th} and 8ve intervals in a melody.

I. Hand out "Intervals and Notes" sheet that we made with intervals, key signatures and intervalic associations.
   - The sheet contains: intervalic associations from Mark Rubinn using common songs to associate with given intervals, acronym phrases to remember the order of notes on treble and bass clefs, acronyms for the order of sharps and flats, instructions on how to determine key signature using sharps and flats and examples, and all intervals under and including an octave.

II. Review intervals learned in Lesson Plan 4

III. Go over "Intervals and Notes" slowly making sure they understand each concept

Lesson Plan 7
April 30, 1999

Objectives: The student will be able to dictate intervals using examples of interval ear training on Practica Musica.

I. On the pod computer, run Practica Musica, the interval ear training exercises, for the whole class.

II. If time, do Human Beat Box

Lesson Plan 8
May 6, 1999

Objectives: The student will have a familiarity with sight-reading a melody line by the end of this lesson.

I. Hand out "sight reading" sheet (the notes to *I Can't Help Falling In Love With You*)

II. Attempt to sight-read "sight reading"

- Have them look over the rhythms and clap them out together one vocal part at a time.
- Starting with the alto part, go over intervals present, and attempt to sing it. Then repeat with the sop I, followed by the sop II parts.
- When comfortable with all three lines, assign 1/3 of the group to each line and attempt to sing all three lines together.
- Do they recognize it? Does that make a difference?

B. Voice Master Class Sheet by Ruth Cooper

VOICE MASTER CLASS - Ruth J. Cooper, BA., MA in Music, member
National Association of Teachers of Singing

POSTURE - STANDING

Feet 4-6" apart, weight equally distributed over both feet, one foot slightly forward of the other
Knees relaxed
Rear slightly tucked under
Chest raised to create space in rib cage and diaphragm area
Ears over shoulders (no forward neck or chin thrust)
Head in easy position, probably slightly tilted up

POSTURE - SEATED

Sit forward on front half of chair (beware of chairs that slope backwards)
Do not slump
Both feet on ground
Chest raised, ears over shoulders, head in easy position (as above)

BREATHING

Diaphragm is a dome-shaped muscle which extends from front to back in a sloping fashion along bottom of rib cage and is attached to bottom of lungs by ligaments. Diaphragm only works to bring air in, then relaxes back to original position, as ribs slowly collapse.
Breathe to lower back: Exercise: Bend over, knees bent and toes pointing in, like a rag doll, head relaxed down, until you are as far down as you can comfortably get. Breathe in through nose concentrating on expanding lower (and upper) rib cage in back. When you resume standing upright, come up slowly using thighs to support your torso.
When you breathe, DO NOT stick the stomach out (diaphragm moves downward, NOT outward) as this makes your back curve in further and inhibits back breath.
Breathing technique is the same standing or sitting.

OPENING UP THE VOICE

Place one finger over one nostril and inhalé slowly through the other, concentrating on deep back breath.
As you take air in, think of stifling a yawn so that your soft palate lifts and your larynx lowers.
This creates the space into which you will put your vowel and establishes an open route through which the sound can travel and find the proper resonators.

SUPPORT

The diaphragm does NOT do the supporting. Read on.
Breath control (support) is achieved by filling to capacity and then keeping the ribs expanded (resisting collapse) as you initiate sound. As you inhale, keep lower abdominal muscles engaged and firm like a corset underneath. Keep chest raised and allow ribs to collapse slowly (keep shoulder blades in back together to help upper chest stay lifted). "Bear down" for greater

VOICE MASTER CLASS (page two)

support esp. for high notes and for more volume. Don't waste air. When you take in air, be sure you are concentrating on LOWER BACK and SIDES. High air (upper chest or "panic" breathing) is useless. We raise the chest to allow for more space for expansion underneath. One caution: if you have a short phrase, take just enough air to last. Longer phrases require more air. But be sure you take the breath deep.

VOWELING

Proper voweling gives proper tone. Use speech vowels to find sung vowel. Unaccented English (no regional overtones) makes for best sound.
Easily placed vowels are: a(ah), e(ē), i(ee), o, u(oo) - long vowels
Harder to place vowels are: uh, ih, eh - short vowels
Jaw must be relaxed
Face must be "alive" - keep a smile in your eyes
Never "spread" any vowel by grinning - keep lips soft and rounded
Resonators: sinuses, mouth, throat, porous bone in head, air space in trachea and bronchial tubes

YOUR WHOLE BODY IS YOUR INSTRUMENT!

CONSONANTS

Consonants should be executed smoothly, quickly and efficiently, giving maximum time to the vowels on which you sing. Consonants should never intrude on the vocal line unless used coloristically.

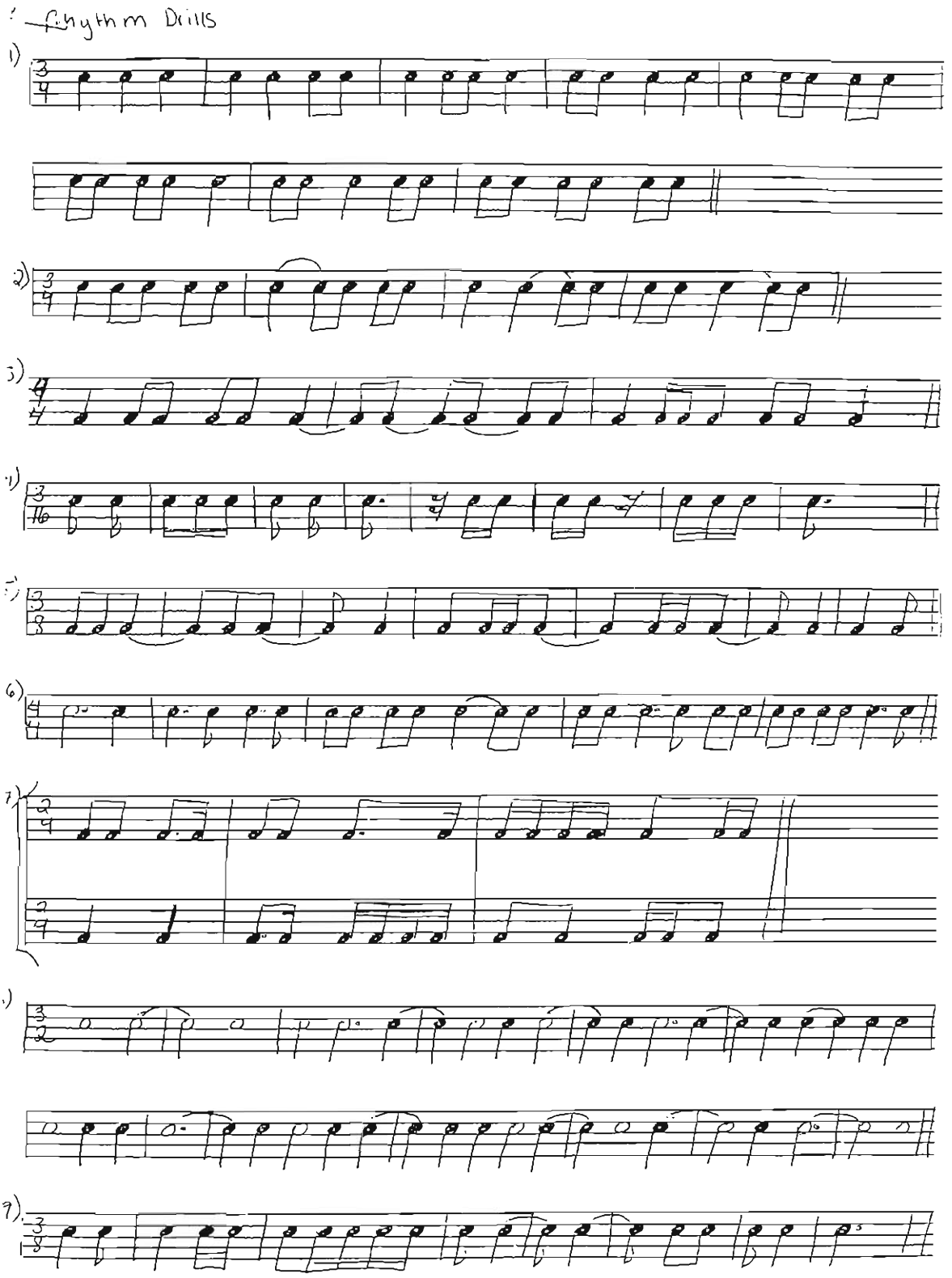
Voiced exploded consonants: B D G (no pitch)
Voiceless exploded: P T K Q C (no pitch)
Voiced pitched: J L M N R V Z
Unpitched sibilants: CH, F, H, S
Vowel-like consonants: W (tight oo), Y (tight EE) used as consonants
Never put an M before a B to secure pitch, nor an N before a D.

ETIQUETTE

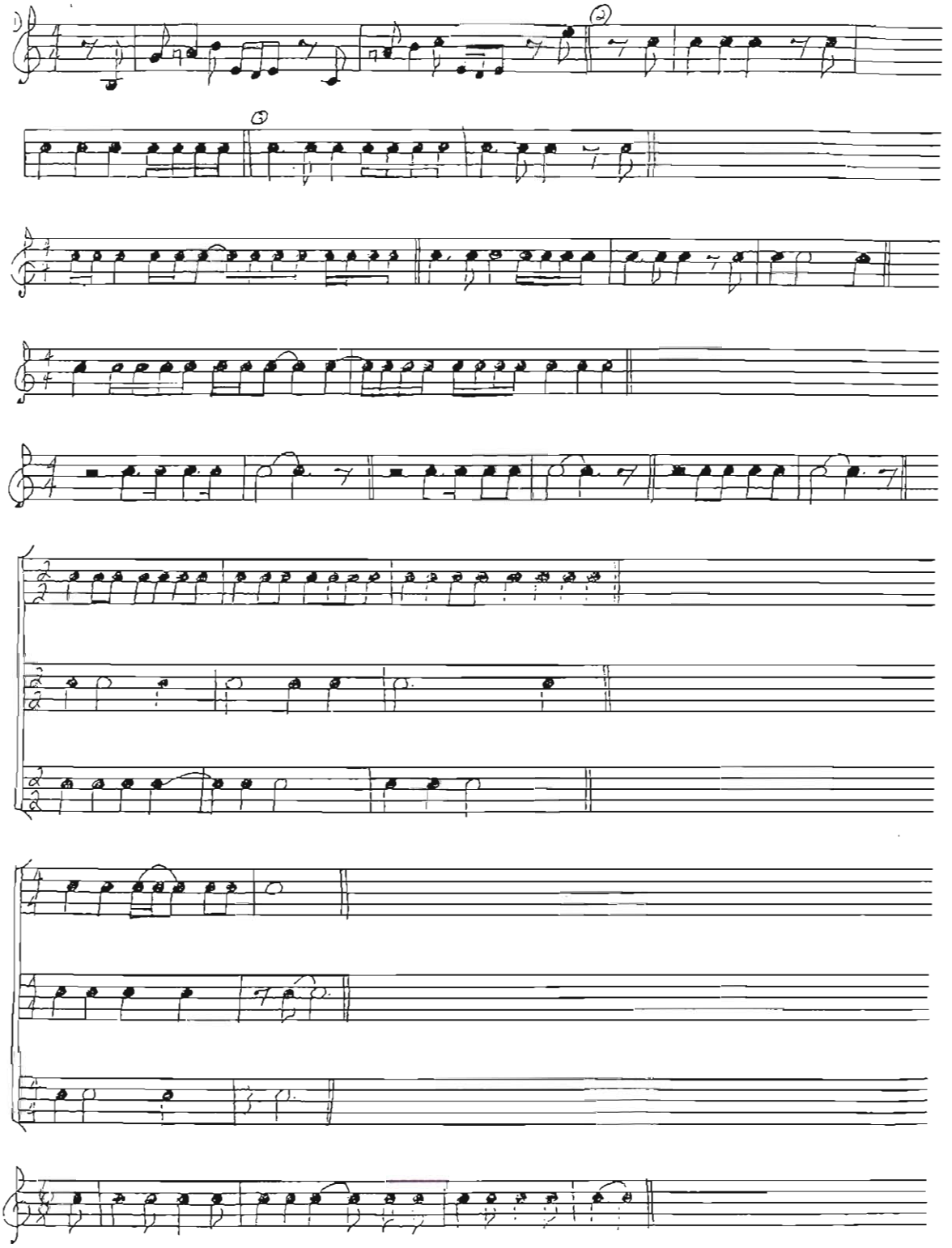
Hold your music up in front of you and far enough forward to see it and also be able to keep your eye on the conductor. Keep shoulders relaxed. Do not "hug" yourself by pressing upper arms against sides. Never sing with your music in your lap or with your head bent way down. Learn your music at home if possible so that you are not tempted to search for pitches at rehearsal. Keep a relaxed attitude so that your anxieties do no reflect in your singing. Be expressive. Enjoy the music. Think about the message you are taking part in delivering. Let your face reflect your emotional reaction to the words and music. This will help your sound come alive.

You will not remember all of this information at once in rehearsal, but if you work on your music and vocal technique at home, you will gradually find yourself improving vocally and enjoying singing more.

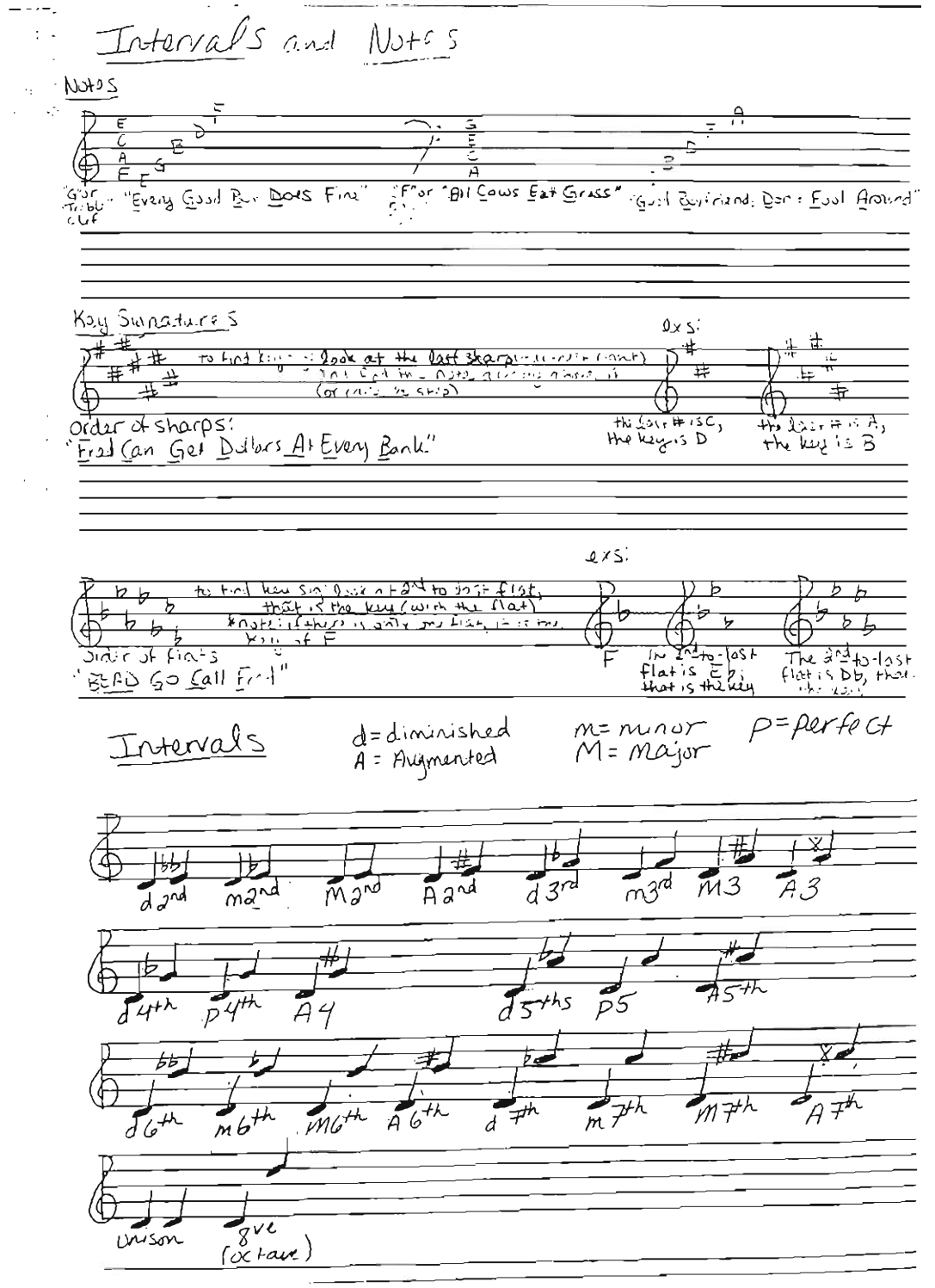
C. Rhythm Drills



(Rhythm Drills, continued…)



D. Intervals and Notes



Intervalic associations (first two notes of the song unless otherwise indicated:

Created by Marc Rubinn Sept 1997

Ascending intervals and their inverses:

Major 2nd	do-re (1-2):	Oh Susanah ("Oh, I Come from...")
	re-do (2-1):	
Major 3rd	do-mi (1-3):	Oh, When the Saints..., Michael, Row the Boat Ashore
	mi-do (3-1):	Swing Low Sweet Chariot, Lou, Lou, Skip to My Lou
Minor 3rd	do-me:	Greensleeves ("Alas, My Love")
	me-do:	
Perfect 4th	do-fa (1-4);	Hineh Ma Tov (1-4-4-4 minor)
		Good King Wenceslas (Ending: "Fu-el")
Perfect 5th	do-so (1-5):	Twinkle, Twinkle Little Star
	so-do (5-1):	Eerie Canal, ("I had a mule")
Major 6th	do-la (1-6): (1-6-4)	Momma's Little Baby Loves Shortnin' Bread
	la-do (6-1):	Nobody Knows the Trouble I Seen (really mi-so)
Major 7th	do-ti (1-7):	Bali High (1-(8)-7), The Pajama Game
Octave	do-do (1-8):	Somewhere Over the Rainbow

Desending Intervals (and their inverses):

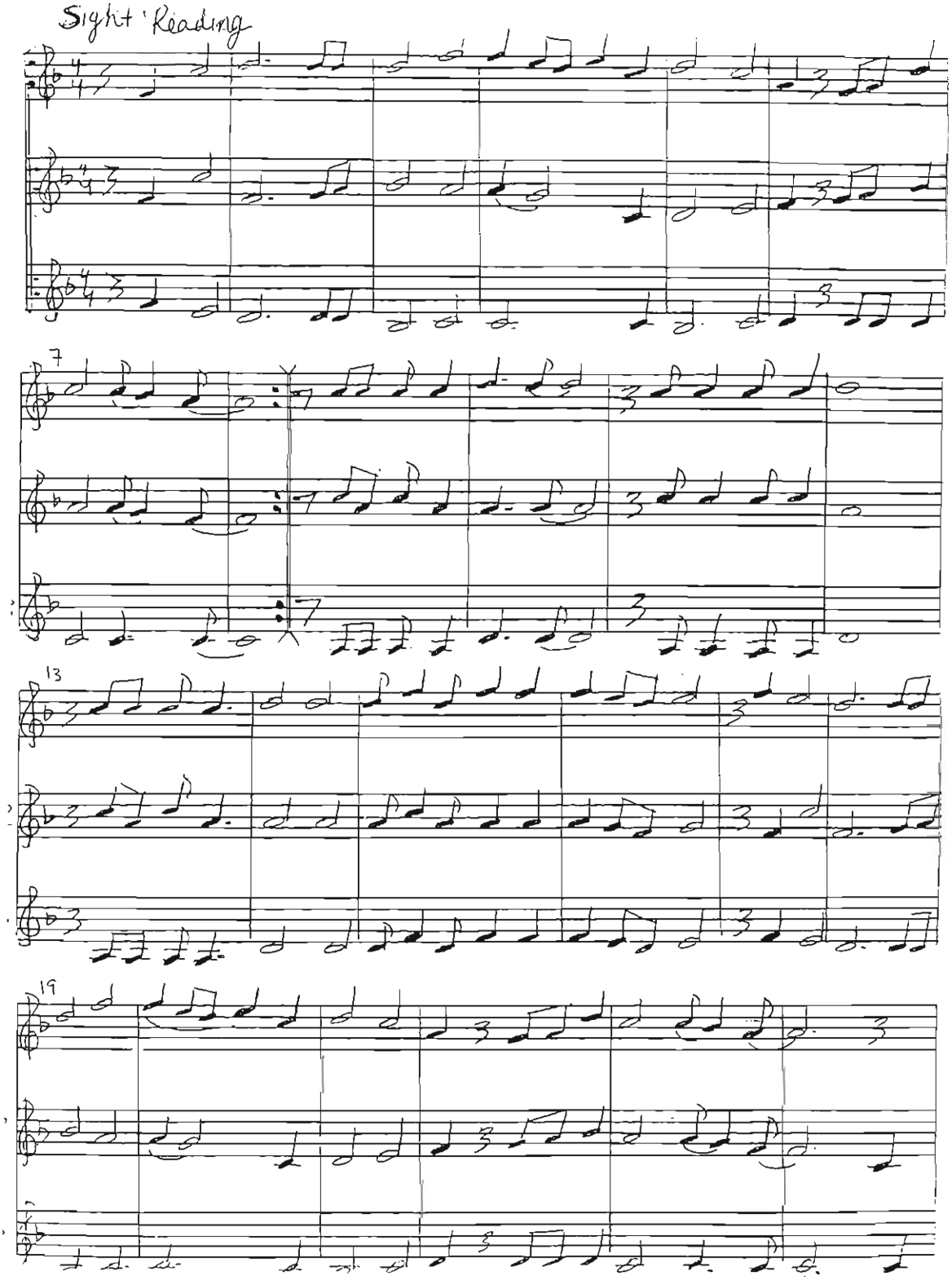
Minor 2nd	do-ti (1-7):	Joy to the World, Ave Maria
	ti-do (7-1):	Fascination (ti-do-mi-so-do[high])
Minor 3rd	do-la (1-6):	Momma's Little Baby (second part) "Put on the skillet": do-do-la-so...)
	la-do (6-1):	The Wave (So close your eyes)
Perfect 4th	do-so (1-5)	Who Can Retell (do-do-so-do...), The Dodgers Pep Song, "Shave and a haircut, two bits"
	so-do (5-1):	Hark, the Herald Angels Sing Red River Valley ("From this valley...") Auld Lang Syne ("Should auld...")
Perfect 5th	do-fa (1-4):	
	fa-do (4-1):	
Minor 6th	do-mi (1-3):	
	mi-do (3-1):	Excerpt: Schubert's "Rosamunde" Overture (mi-do-so, mi-do-so)
Minor 7th	do-re (1-2):	West Side Story "There's a Place (for us)"
	re-do (2-1):	

Please add your own discoveries to the list. Let me know about any which I have not been able to come up with.

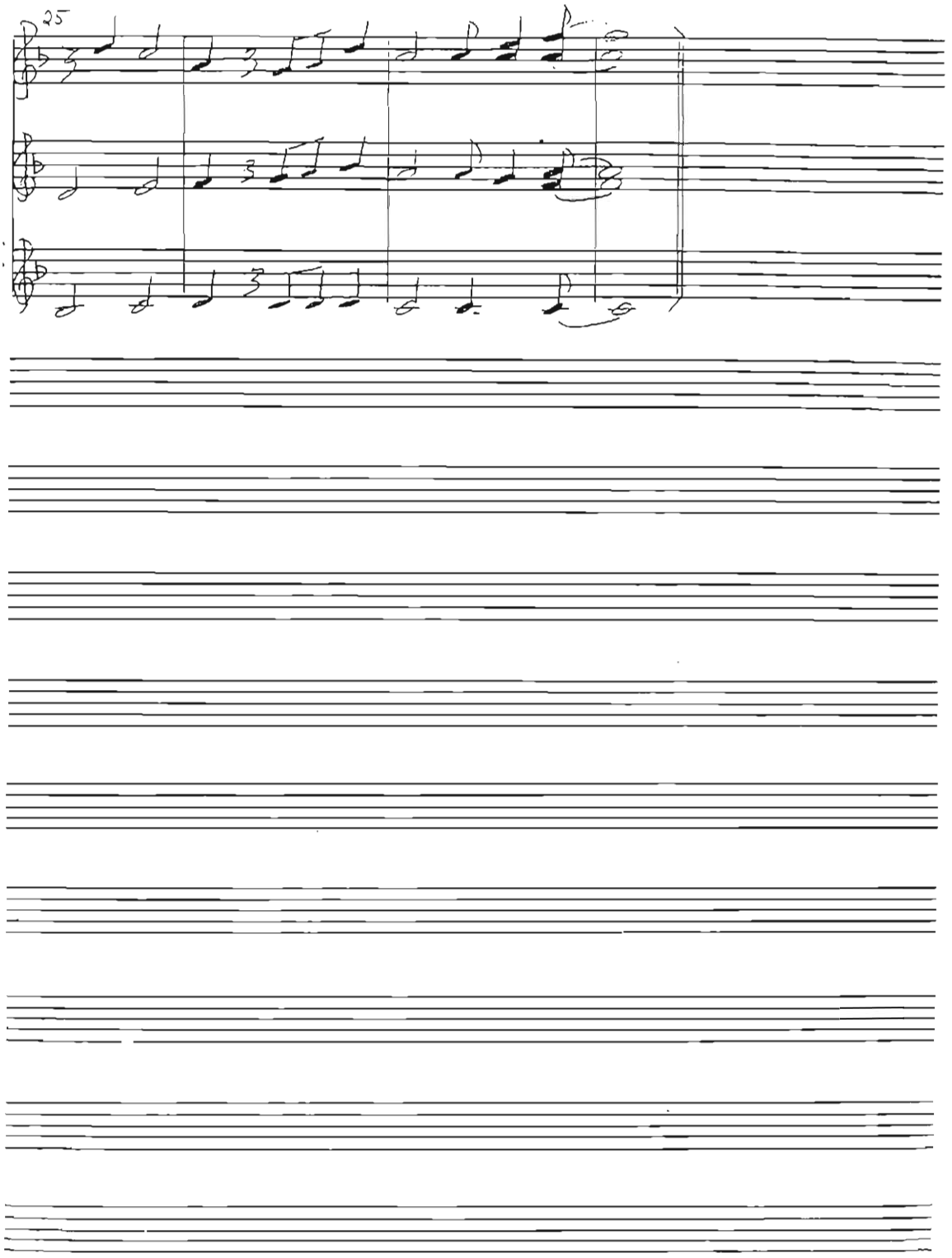
However, the use of such associations can be misleading for the following reason:

Look at the example for the inversion of the ascending Major 6th (Nobody Knows...). In fact, if one were to sing this song in solfege the first two syllables, as noted above, would be mi-so. That is because the key (or first degree of the scale or 'do') of the song is actually the note that falls on "knows". This point maybe a little obscure at this point, because we have not yet practiced singing songs in solfege. Suffice it to say, when we sing songs, especially folk songs, we sense, though perhaps unconsiously, the place (note/sound) to which the song tends to gravitate. Almost invariably the song will end on this note and the note I am speaking of, is of course, 'do'. Most people unconsciously (for sight-singers, more consciously) carry an intuitive feeling for that note. Therefore, if for instance you learn the association of the first two notes of "Here Comes the Bride" for the perfect fourth, that association holds true only for the perfect fourth that goes from 'so' ascending to 'do'. Many popular songs do begin with this interval, but knowing that interval in that specific context (so-do) will not help you much when

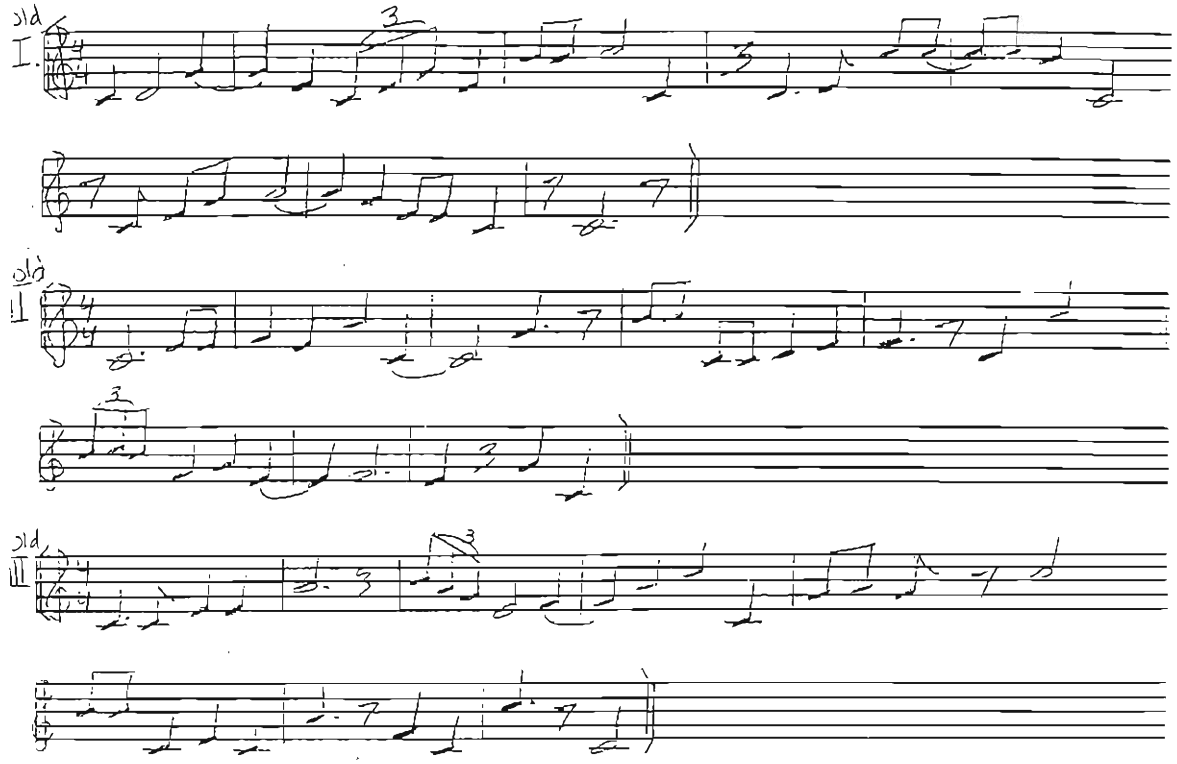
E. Sight-reading



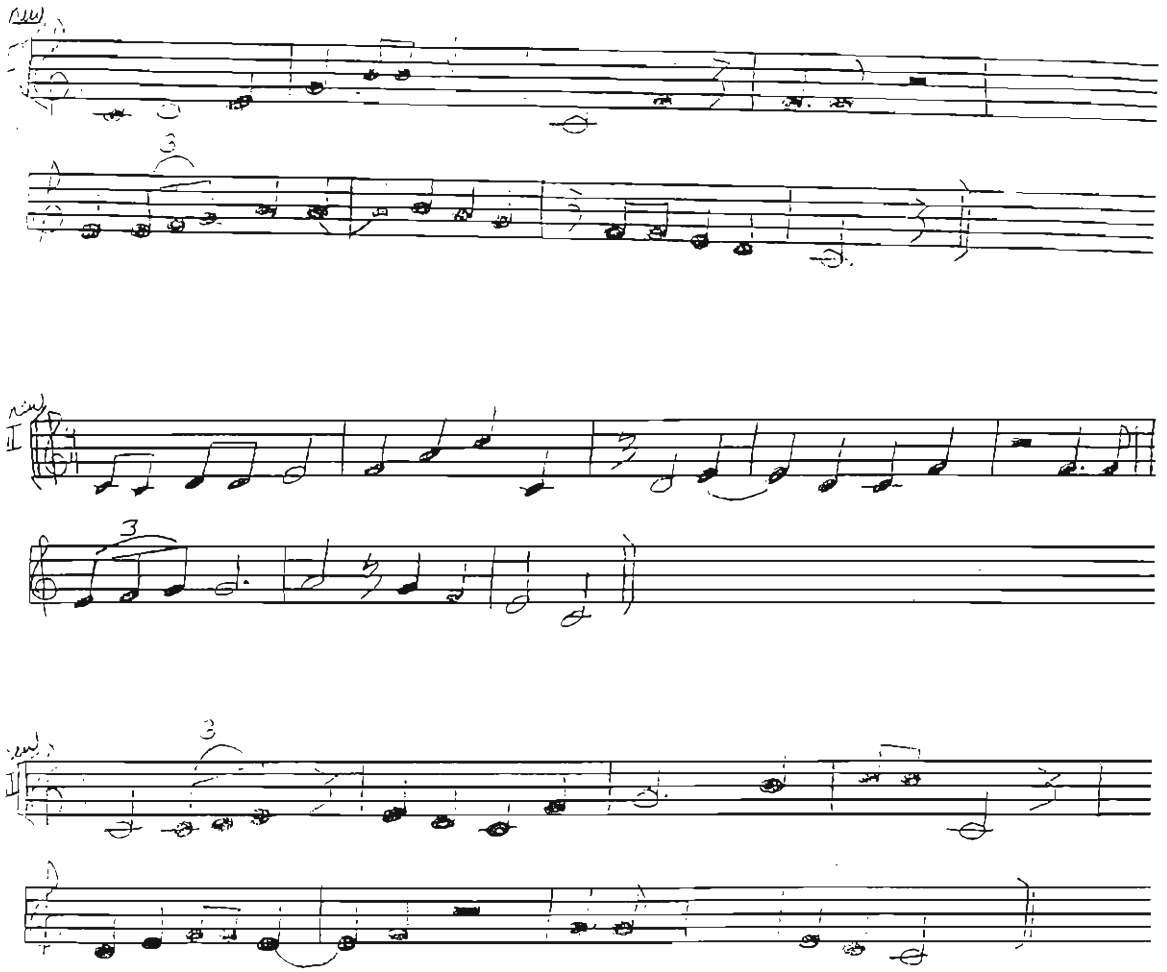
(Sight-reading, continued…)



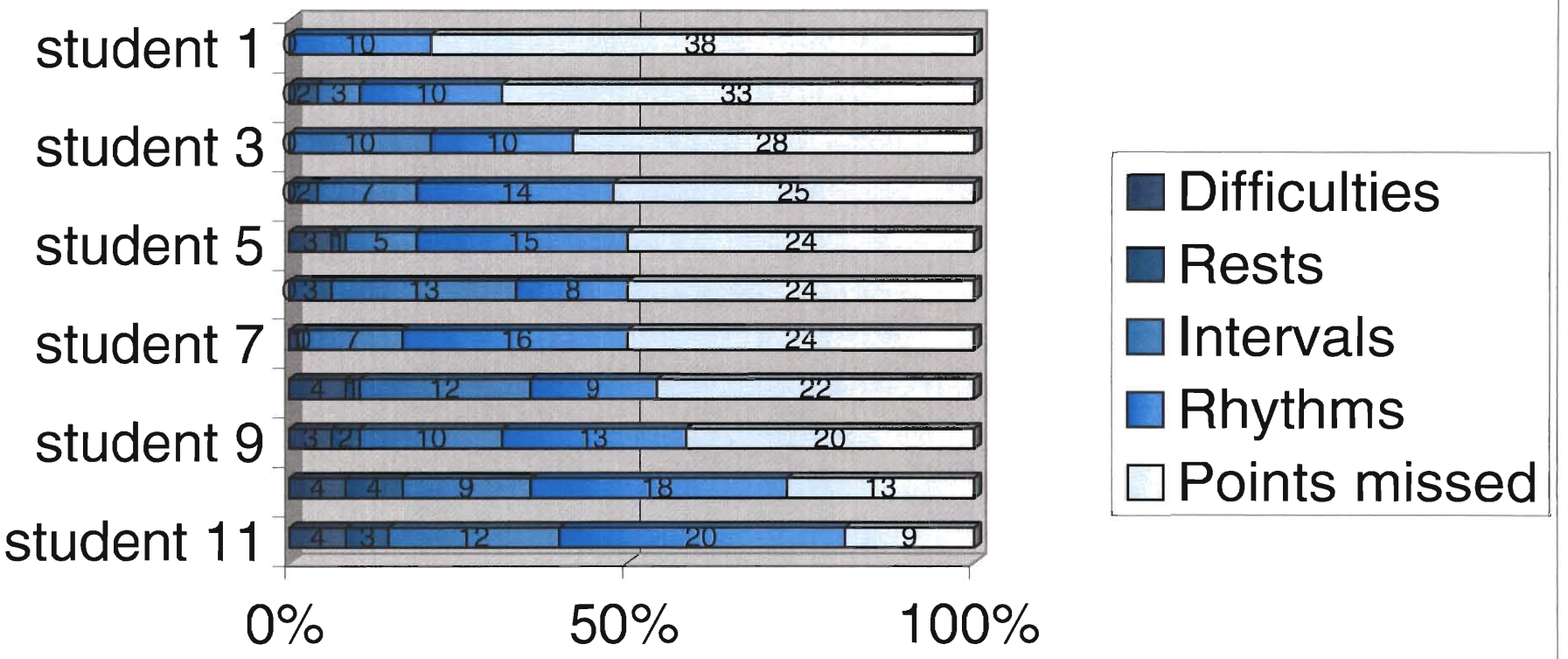
F. Test 1



G. Test 2



Sight-reading Test Results



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