A Research-Based Approach to Piano Pedagogy
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Abstract

This piano method proposal is based on decades of research into how humans learn music, the child's voice, correcting the faulty American idea that a few are musical but most are not, and specific strategies that facilitate musical development. Using this proposed approach, piano teachers can prepare students to be lifelong musicians, able to sing in tune, to keep a beat, to read notation and apply it to both voice and piano, to improvise, to play from a lead sheet, and to play classical music.

Keywords: piano pedagogy, piano method, singing in tune

Chapter One
Literature Review

The Relationship of Pitch Sight-Singing Skills with Tonal Discrimination, Language Reading Skills, and Academic Ability in Children.

James L. Reifinger conducted a study entitled, "The Relationship of Pitch Sight-Singing Skills with Tonal Discrimination, Language Reading Skills, and Academic Ability in Children." He tested 87 girls and 83 boys in second grade with an average age of 7.5 years "at the midpoint in the study." (Reifinger J. L., 2018) Tonal discrimination was tested using IMMA-T in October and March (pre and post). Academic ability was tested using OSLAT in October. The oral reading subtest of DIBELS, (DORF), was administered to test linguistic reading ability. Two curriculum-based assessments were employed to augment the DORF: the Reading Guide and Reading Comprehension tests. Both were administered as a pre-test and post-test. (Reifinger J. L., 2018)

Beginning in October after the pretests, sixteen twenty-five minute sessions over sixteen weeks were employed to teach these students simple tonal patterns using noteheads on a five-line, four-space staff with no clef or flat, using the F major tones do, re, mi, sol, and la (F^4-D^5). Instruction was consistent, and pattern reading (and echoing the teacher) was done at the beginning and end of the twenty-five minute sessions, with rote songs being sung between pattern sessions. At the end of the sessions, two notation-singing tests were administered, one in March after the sixteen weeks of instruction, and one in May, with no pattern practice between tests. Both of these tests yielded two results: a starting pitch-matching score and a notation-singing score. (Reifinger J. L., 2018)

Reifinger found that 63.5 percent of variance in achievement was matching the starting pitch. He noted, "After partialing out pitch matching, significant variance in achievement on notation-**singing** test 1 was explained by the reading comprehension pretest, OLSAT verbal subtest, and reading comprehension posttest." (Reifinger J. L., 2018) Reifinger continued, "Reading Achievement correlated positively with Music Achievement as hypothesized." (Reifinger J. L., 2018) Another interesting find was the corroboration with Hornbach and Taggart's 2005 "suggestion that singing voice use and tonal aptitude are apparently separate constructs." (Reifinger J. L., 2018)

Reifinger reported 5 percent of the variance in sight singing achievement test 1 and 6 percent of the variance in achievement test 2 were predicted by reading comprehension. He noticed "a robust association between reading comprehension and notation-**singing** achievement," and he found "reading comprehension to be a significant predictor of young children's achievement in reading and **singing** pitch notation." (Reifinger J. L., 2018)

The Relationship between Developmental Tonal Aptitude and Singing Achievement among Kindergarten, First-, Second-, and Third-Grade Students.

Christina Hornbach and Cynthia Taggart did a study entitled, "The Relationship between Developmental Tonal Aptitude and Singing Achievement among Kindergarten, First-, Second-, and Third-Grade Students." One hundred sixty-two children of diverse socioeconomic backgrounds from the listed grades participated from two schools in different districts. The only significant difference in the twice weekly music classes at these schools was that School Two's teacher placed more emphasis on solo singing. (Hornbach & Taggart, 2005)

In spring, the PMMA: Tonal subtest was administered by the music teachers. Then a singing achievement test was given to students following four class-periods of instruction on the song "Bow Belinda." Findings suggested that there is not a strong correlation between tonal aptitude and singing achievement. School Two scored higher than School One in singing achievement, which may suggest teacher emphasis on singing in the head voice is effective. (Hornbach & Taggart, 2005)

Second grade scored higher than the other grades, including third. It was suggested that peer pressure results in older children choosing not to use their singing voices. Researchers reported, "Third-grade students seemed less at ease in the testing situation than did younger children. This was illustrated by a third-grade boy, who commented in an embarrassed tone, 'That was my "girl" voice,' after singing accurately in a pure, boy-soprano singing voice." (Hornbach & Taggart, 2005) Researchers suggested giving special attention to teaching the skill of singing in the head voice in the elementary classroom and advising families to encourage singing voice in their children to combat the apparent peer pressure. (Hornbach & Taggart, 2005)

Task-Based Variability in Children's Singing Accuracy.

Bryan Nichols selected 120 fourth grade students from two public and four private schools. Each student answered three background questions (age, diagnosis of hearing problems, and history of private music lessons). Nichols created an assessment "employing four task types: single pitch, interval, pattern matching, and song singing." (Nichols, 2016) Each task had two response modes: solo and doubled. A pre-recorded adult soprano voice with low vibrato on the neutral syllable "du" was the prompt for student echoing and also served as the doubled voice. This provided consistency for

testing. Nichols noted, "Each of the three pitch-matching tasks contained five items preceded by a practice item." (Nichols, 2016) The song was prompted by a recorder giving the first tone and the recorded voice saying, "Ready, set, sing." The song "Jingle Bells" was not modeled but sung from memory. "To control for order effects, half the sample began in the solo response mode, and half began in the doubled response mode." (Nichols, 2016)

Two questions were answered in this study. Question One dealt with "Discrimination and Difficulty of Assessment Tasks." Nichols reported, "For this fourth-grade sample, the order of difficulty from easiest to hardest was (a) doubled intervals, (b) doubled single pitches, (c) doubled patterns, (d) solo intervals, (e) solo single pitches and doubled song ("Jingle Bells"), (f) solo song ("Jingle Bells"), and (g) solo pattern." (Nichols, 2016) Question Two dealt with "Items Required for Valid Assessment." Based on his findings, Nichols urges, "Teachers must construct assessments incorporating tasks used during the teaching process. Importantly, for summative assessment, at least three items per task type must be used for reliable assessment." (Nichols, 2016)

Beyond the findings listed above, the researcher prescribed scaffolding to provide remedial help for inaccurate singers. Nichols noted, "Overall, the most accurately performed solo task was not sung as accurately as the least accurate doubled task." (Nichols, 2016) He suggested priming for solo responses by unison singing with a good model, because the half of the group who sang in doubled-response mode before solo-response mode scored higher on the solo singing than did the half who sang solo first. (Nichols, 2016)

Establishing an empirical profile of self-defined "tone deafness": Perception, singing performance and self-assessment.

Karen Wise and John Sloboda chose thirteen self-defined "Tone Deaf" participants and seventeen self-defined "Non-Tone Deaf" participants for this study. (Wise & Sloboda, 2008) Three areas were measured:

1. Singing (matching pitches and short patterns; the song "Happy Birthday")

2. Perception (Montreal Battery of Evaluation of Amusia)

3. Self-report (self-assessment of performance; background questionnaire)(Wise & Sloboda, 2008)

In the singing test, there was an echo condition and a synch condition. Both groups scored better on the synch than the echo. "Happy Birthday" was sung both accompanied and unaccompanied. Both groups scored higher on the accompanied version than the unaccompanied. Wise and Sloboda concluded that although the self-perception of and performance of the "Tone Deaf" participants was lower than that of the "Non-Tone Deaf" participants, their scores were "normal" when compared to the population. Their scores were very different from those of "congenital amusics." Therefore, this study suggests that a high percentage of self-described "Tone Deaf" people are actually normal and could significantly improve their musicality given "targeted intervention." (Wise & Sloboda, 2008)

Singing Ability, Musical Self-Concept, and Future Music Participation.

Kelley, Pfordresher, and Demorest conducted a study to find out if singing ability and musical self-concept are predictors of participation in elective music. They drew " . . . sixth graders (mean age 12.16) drawn from five different elementary schools that all feed the same junior high school in a suburban district in the Pacific Northwest region of

the United States." (Demorest, Kelley, & Pfordresher, 2017) 319 students from these

schools (95% of total sixth grade population) were surveyed, filling out two

questionnaires that were administered prior to their registration for seventh grade classes.

This was deliberate so surveys could be matched with electives chosen to determine if

predictors could be pinpointed. Survey One related to family and musical background.

Survey Two (24 items) is as follows:

> Musical Self-Concept (6 items), Attitudes About Music and Singing (6 items),
> Peer Influence (6 items), and Cost of Participation (6 items). Musical Self-
> Concept statements (e.g., "People like to hear me sing") assessed how confident
> the students felt about themselves as musicians and singers.
> Of the 319 students that completed the questionnaire, 51% registered for
> elective music in seventh grade. Of those 161 students (53% female) who chose to
> continue in music, 45% chose band, 32% chose orchestra, 21% chose choir, and
> 2% chose multiple music classes. . . . Only musical self-concept, peer influence,
> and family musical engagement were unique predictors
> of music participation decisions. (Demorest, Kelley, & Pfordresher, 2017)

A second study sampled those surveyed to find out if actual singing ability and

musical self-concept were related. Researchers reported, "The 100-student sample

yielded a total of 55 students (**music** participants = 32, 53% female; nonparticipants = 23,

30% female) who consented to have their **singing** accuracy tested." (Demorest, Kelley, &

Pfordresher, 2017) After the student sang "Happy Birthday" on a starting pitch of his or

her choosing, eighteen echo tasks including single pitches, intervals, and patterns were

prompted. After the echo tasks, the student was asked to sing "Happy Birthday" one more

time. After blind judges scored the recordings, the data was compared. Researchers

reported there was no significant difference between participants and non-participants for

the echo tasks and for "Happy Birthday." (Demorest, Kelley, & Pfordresher, 2017)

In answering the question of correlation between singing accuracy and variables

influencing elective participation, musical self-concept was found to be the only predictor

of singing accuracy. "Results indicate that every standard deviation increase

in musical self-concept corresponds to a predicted increase of 16% in echo singing

accuracy and 1.05 points in song-singing accuracy." (Demorest, Kelley, & Pfordresher,

2017) However, the difference between the singing accuracies of participants and non-

participants was minimal. (Demorest, Kelley, & Pfordresher, 2017)

This study was found to have 74% accuracy as a predictor of which students

would elect to participate in music. The researchers concluded that this can aid

elementary music teachers by helping construct questions which will identify students

with musical self-concept issues in order to help remedy their self-concepts, remembering

the difference in actual ability was minimal. If elementary music teachers can help

students improve their own musical self-concept, then more students will grow up with a

positive view of music. The researchers pointed out that many adults today formed their

negative musical self-concept ideas based on elementary music teacher feedback.

(Demorest, Kelley, & Pfordresher, 2017)

Relationships between Pitch-Matching Accuracy, Speech Fundamental Frequency, Speech Range, Age, and Gender in American English-Speaking Preschool Children.

Valerie Trollinger conducted a study of seventy children from three geographical

locations: Pennsylvania, Indiana, and California. Trollinger notes, "Overall, the

breakdown of participants by age was: 36-47 months, n = 17; 48-59 months, n = 31; and

60-71 months, n = 22. The mean age of the subjects in this study was 54.16 months, with

a standard deviation (SD) of 9.16." (Trollinger, 2003) Thirty-eight participants were girls,

and thirty-two were boys. (Trollinger, 2003)

Children were individually recorded in a quiet room. The researcher recorded an

initial conversation about the beanie babies she had placed in the room. Then the child

rolled dice to select the tape that would be used for the patterns. (The patterns were

identical for all participants, but the order was randomized on 11 tapes.) Pattern Pair Low

(PPL) was C-D-C, Pattern Pair Medium (PPM) was E-F Sharp-E, and Pattern Pair High

(PPH) was G-A-G. A five-year old girl was the pre-recorded singing model. After the

singing pattern the child was asked to say the words "How now brown cow." (Trollinger,

2003)

The researcher used computer analysis to find the main speaking voice frequency

(MSF) and speaking voice range as well as singing pitch accuracy. Trollinger described

her procedure as follows:

> Individual pitch level pattern pairs [Low (C-D-C), Middle (E-F SHARP-E), High
> (G-A-G)] were examined in relation to the independent variables of age,
> MSF, gender, and speech range. . . . For both [genders], there was a wide range of
> variability in response for all patterns, with the standard deviations for the lowest
> pattern being smaller than for the highest pattern. Overall, the girls were more
> accurate pitch-matchers than were the boys in this study. . . For PPL, age emerged
> as the predictor of pitch-matching accuracy. Mean speech frequency emerged as
> the strongest predictor of pitch-matching accuracy for PPM, followed
> by gender. Speech range emerged as the strongest predictor for singing PPH
> accurately, followed by gender and MSF. (Trollinger, 2003)

The children with higher MSF readings were more accurate on PPM and PPH.

Trollinger recommended ensuring that the speaking and singing models for children were

not speaking and singing too low for the developing children with whom they are

working. Going into detail about the developmental details of the ligaments and muscles

in the voice, she concluded that those working with young children should keep in mind

that the children are not able to match every pitch, and they need to sing in a comfortable

range for these children. Trollinger also noted that the same muscles are used for speech

as well as singing, and the vocal speaking habits formed in early childhood could impact

the child's singing voice. She further recommends that music educators combine the

cognitive development research with the voice specialist research to develop the optimal

singing pedagogy for very young developing voices. (Trollinger, 2003)

Factors Influencing the Pitch-Matching of Junior High Boys.

Steven Demorest and Ann Clements explored "the influence of perceptual skills,

type of pitch-matching task, and vocal range on the pitchmatching ability of

adolescent boys." (Demorest & Clements, 2007) Sixty adolescent boys from three middle

schools in grades six through nine participated in the study. Boys were assessed for their

voice classification and comfortable singing range, and then assigned "to either the high-

voice condition (A_3-E_4 [where middle C is C_4]; n = 29) or the low-voice condition (E_3-

A_3; n = 31) for testing," according to the researchers. (Demorest & Clements, 2007)

Two pitch matching tasks were presented: perceptual and vocal, in "counter-

balanced order." (Demorest & Clements, 2007) The researchers designed a computer

based Pitch Matching Perception Test (PMPT) which simulated matching rather than

tuning, with a total of six pitches to be matched. The same high or low conditions were

used for the perception as for the vocal test. The vocal test consisted of two conditions

with four pitches to match per condition. For the single-pitch condition, a male vocal

model with minimal vibrato sang the pitch for them to match. The participants were

recorded and evaluated later. For the context-pitch condition, participants heard a male

vocal model sing on a neutral syllable a series of pitches such as do-re-mi-re-do or do-mi-

sol-mi-do. They were asked to match the final pitch in each series. Again, they were

recorded and evaluated later. Prior to the test, participants had a training period.

(Demorest & Clements, 2007)

The researchers reported, "Based on their performance on the vocal matching

task, subjects were classified as either certain (7-8 pitches correct, mean = 7.91, n = 36), uncertain (0-1 pitches correct, mean = 0.67, n= 12), or inconsistent (2-6 pitches correct, mean = 4.42, n = 12)." (Demorest & Clements, 2007) Significant differences were found in "perceptual scores based on vocal matching ability." (Demorest & Clements, 2007) Uncertain singers' perception scores were significantly lower than inconsistent and certain singers; however, the inconsistent and certain singers' perceptual scores were not significantly different from each other. The researchers noted that these finding suggest that development of perception skills might precede development of matching skills because the inconsistent singers could perceive pitch better than they could match it. (Demorest & Clements, 2007)

Another significant difference was the scores for all the groups in context-pitch singing and single-pitch singing. For all groups, context-pitch singing scores were higher. However, they were significantly higher for the inconsistent group alone, further supporting the idea that perception precedes vocal matching because they were able to use their perceptual skills to aid their vocal matching. The researchers revealed that if context-pitch condition were the only test administered, one-third of the inconsistent singers would have been labeled "certain" because their scores in context-pitch matching were perfect. Almost half (five out of twelve) of the inconsistent singers would have been labeled uncertain if only the single-pitch condition were used, because their scores for that portion were so low. For teachers, the researchers recommended using a variety of tasks to facilitate perception and pitch-matching in addition to the intonation normally addressed in choirs. (Demorest & Clements, 2007)

The Acquisition of Sight-Singing Skills in Second-Grade General Music: Effects of Using Solfège and of Relating Tonal Patterns to Songs.

James Reifinger conducted a study of 193 second-grade students from three public schools (twelve general music classrooms) involving a pre-test, sixteen weeks of sight-singing instruction during regular music class time (25 out of 45 minutes), a post-test, and (after an interval of eight weeks), a retention test. The instruction time involved "the children (1) reading and singing tonal patterns and (2) singing specified songs with activities such as singing games." (Reifinger J. L., 2012) There were four "randomly selected" instructional treatment conditions, and each classroom received only one of them. (Reifinger J. L., 2012) However, the patterns and sequence of introduction were consistent across all groups. Also, previously learned patterns were reviewed; additionally, one new pattern and one new rote song were introduced weekly. Reifinger notes, "Within each song condition, one group used solfège and the other used loo when singing the tonal patterns. Hence, the treatment conditions were (1) related songs/solfège (n = 50), (2) related songs/loo (n = 40), (3) unrelated songs/solfège (n = 46), and (4) unrelated songs/loo (n = 57)." (Reifinger J. L., 2012)

Notation was represented on large flashcards with a staff of five lines and four spaces. Only noteheads were printed on the staff. The range (F4-D5) was based on previous research related to comfortable singing range for elementary school children. Syllables used in the patterns, in order of their introduction, were Sol, Mi, La, Do, and Re. Twenty-five patterns were used for the pre-test. Fifteen patterns were introduced in fifteen consecutive weeks. Week sixteen was a review. The post-test and retention tests used the twenty-five original patterns, ten of which were unfamiliar because they were never introduced and reviewed during class time. (Reifinger J. L., 2012)

By comparing note accuracy, contour accuracy, pattern familiarity, and pattern

unfamiliarity, participants were scored for four sight-singing performance factors. Stronger pre-test to post-test effects were found for familiar patterns than unfamiliar patterns. Although there was a slight decline from post-test to retention-test for familiar patterns with contour accuracy, the retention-test scores were still significantly higher than the pre-test scores. Researchers noted, "A Tukey test used to compare the posttest means indicated that with familiar patterns, unrelated/solfège treatment resulted in significantly greater mean contour accuracy than related/loo (p < .001) and unrelated/loo treatment (p < .001)." (Reifinger J. L., 2012) Unrelated/solfege retained its superiority to related/loo and unrelated/loo in the retention test. However, for unfamiliar patterns, the unrelated/loo treatment was significantly more effective for contour accuracy than the related/solfege treatment. (Reifinger J. L., 2012)

These findings suggest that sight-singing instruction greatly improves second-graders' sight-singing skills and that second graders are able to transfer sight-singing skills learned with familiar patterns to unfamiliar patterns. Reifinger noted,

> The students retained their sight-singing skills after an 8-week period of no instruction with one exception, a small but significant decline in contour accuracy with the familiar patterns. It should be noted, however, that the pre- to posttest gain was strongest for this measure, indicating very large practical significance, while the posttest to retention test difference indicated very small practical significance. (Reifinger J. L., 2012)

He reported that results supported other findings that children develop contour sight-singing ability before pitch/interval sight-singing ability. Solfege usage scored higher on contour accuracy than loo for patterns practiced in class. However, loo usage scored higher on contour accuracy than solfege for the unfamiliar patterns. Reifinger proposed that the cognitive load of applying solfege to unfamiliar patterns was too much for the second graders to process, while the use of a neutral syllable allowed the brain to

focus on just one thing. He also concluded that solfege could be viewed as a referent or

priming element, which both aid in recall, or that it could be viewed as text, which is also

linked to recall. This study also found that participants in the groups relating patterns to

songs did not score higher than the groups that did not relate patterns to songs. Because

all of the groups scored significantly higher on the post-tests, this study supports the idea

that second-graders will improve their sight-singing skills significantly with pattern

instruction using solfege. (Reifinger J. L., 2012)

An Analysis of Tonal Patterns Used for Sight-Singing Instruction in Second-Grade General Music Class.

James Reifinger analyzed the 25 patterns used in his study on the Acquisition of

Sight-Singing Skills (published 2012) to rank them from easiest to hardest and to find the

characteristics of the patterns that might explain their rankings in order to inform better

strategies for teaching sight-singing. Scores in parentheses are from the retention test;

P=Pitch, C=Contour; 1=Easiest, 25=Hardest (Information about missing patterns from

the set of 25 was not given.) (Reifinger Jr., 2009)

Familiar patterns were practiced over sixteen weeks; unfamiliar patterns were only seen at test times.

Familiar:
Pattern 1 sol-mi-sol-mi EASIEST (P:1, C:3)
Pattern 6 sol-sol-mi-la MOST DIFFICULT (P:16.25, C:23)
Pattern 8 contains fifth (P:5, C:11.5) *(P:16.5, C:21 on pretest)*
Pattern 10 do-do-do-mi (P:3, C:5)
Pattern 12 do-do-do-re (P:7, C:7)
Pattern 13 do-do-re-re (P:15, C:13)
Pattern 14 do-do-re-mi (P:19, C:25)
Pattern 15 all-descending (P:13, C:9) *(C:1 on pretest)*

Unfamiliar:
Pattern 16 solo-mi-sol-do (P:16.5, C:6) *(P:5.5, C:11 on pretest)*
Pattern 18 sol-do-sol-do (P:22, C:4) *(P:9, C:10 on pretest)*
Pattern 22 all-ascending (P:25, C:16) *(C:5 on pretest)*

Pattern 23 do-re-mi-do (P:18, C:10) *(P:1 on pretest)*
Pattern 24 do-re-mi-sol (P:22, C:15) *(P:2, C:3 on pretest)*
Pattern 25 contains fifth (P:24, C:8)

Reifinger found that there was little correlation between pre-test scores and post/retention test scores. However, there was correlation between the post and retention test scores, supporting the idea that the skill was retained. As expected, students sang the familiar patterns better on the post/retention tests than the unfamiliar patterns. He also found that students sang contours more accurately on the pretest when they began with an ascending interval. Pattern 1 was found to be easiest, followed by pattern 10. Patterns 23 and 24 were easy for children to read on the pretest; they have also been found easy for children to echo-sing by Sinor, according to Reifinger. (Reifinger Jr., 2009)

Patterns 12, 13, and 14 are believed to be more difficult for the students on the pretest despite their "easy" appearance because of the repeated pitches. Reifinger says, "The 12 patterns that have repeated notes are all within the lowest ranked (most difficult) positions on the pretest." (Reifinger Jr., 2009) Patterns 22 and 24 (all-ascending) and 15 (all descending) were easy contours on the pretest. However, little or no improvement was gained on these patterns after instruction. Reifinger suggests a ceiling effect. (Reifinger Jr., 2009) The down-up-down contour of patterns 1, 16, and 18 was "moderately difficult" for students on the pretest. (Reifinger Jr., 2009)

Pattern 1, which was familiar, scored easiest on the post/retention tests. Unfamiliar pattern 18, with a wide leap, was easier in terms of contour but harder in terms of pitch; unfamiliar pattern 16, with a smaller leap, was harder in terms of contour but easier in terms of pitch. Pattern 6, considered most difficult, was surprising given that it is "part of a children's taunt song." (Reifinger Jr., 2009) However, Reifinger concluded

that patterns ending on la are difficult for students. (Reifinger Jr., 2009)

Patterns 12 and 14 were difficult, which was unexpected. Pattern 12 was not as hard, perhaps because the move to re was not on a secondary metrically accented beat, according to Reifinger. (Reifinger Jr., 2009) Previous research has demonstrated that children have difficulty with intervals larger than a fourth, and that research was supported by this study. Patterns 8, 16, 18, and 25 contained fifths, but only pattern 8 was practiced. The fact that pattern 8 showed better results at post and retention testing suggests that had patterns 16, 18, and 25 been practiced, the results may have been better for them. (Reifinger Jr., 2009)

Reifinger found that pattern difficulty was not affected by whether it was melodic (stepwise) or harmonic. He further noted that it mattered not how many different pitches or which pitches (of do, re, mi, sol, and la) were used. He concluded that the information gained from this study can aid sequencing and in selection of materials used in teaching beginning pitch-reading. Developing strategies from the information provided will complement the goal of teaching sight-singing to children. (Reifinger Jr., 2009)

Effects of Familiarity with a Melody Prior to Instruction on Children's Piano Performance Accuracy.

Katherine G. Frewen studied 97 children in Kindergarten through Fourth Grade to see the effects of familiarity with a melody prior to instruction. The subjects had no previous instrumental instruction. Half of the subjects listened to the melody repeatedly in music class in order to become familiar with it. Frewen cited three studies, one by Bandura, one by Shea, Wright, Wulf, & Whitacre, and the third by Shea, Wright, Park, & Gaunt, which suggested that aurally and visually modeling increased practice effectiveness and performance accuracy. She then cited additional studies supporting

modeling as the most effective means of music education. (Frewen, 2010)

Frewen gathered information from two studies, one by Duke and the other by Siebnaler, to ascertain that private instrumental lessons are more effective with more modeling and less teacher "verbalization." (Frewen, 2010) However, two researchers, Speer and Kosta, found in separate studies that more time was spent talking than modeling in piano lessons. Frewen also cited Suzuki, who taught that familiarity with the music was essential for learning. (Frewen, 2010)

Focusing on piano methods, Frewen analyzed four method books for beginning piano students. Only the Suzuki method emphasized listening to recorded models or live models. Based on the research, Frewen deduced that incorporating listening into a student's routine would seem helpful. Her method for the study involved three experimental steps.

1. The group not familiar with the melody was instructed and tested.

2. All the children were exposed to the recorded model for familiarity.

3. The familiar group was then instructed and tested. (Frewen, 2010)

The researcher kept as even a distribution of boys and girls across grade levels as possible, and there were two groups: Unfamiliar (Control) and Familiar (Experimental). Each grade level had around ten students per group. Frewen used "Perpetual Motion" from Suzuki, transposing it to accommodate voices, and simplifying the rhythmic notation. She then instructed and tested the students in the Unfamiliar group for a period of two weeks. Once that was complete, all the students were exposed to the recording 128 times over a two-week period. Then Frewen instructed and tested the Familiar group. She administered the Melodic Error Recognition Test to ensure that the Unfamiliar group was

unfamiliar and that the Familiar group was familiar. She also administered the Kaufman

Assessment Battery for Children, the Number Recall subtest and Hand Movement

subtest. (Frewen, 2010)

The instruction and testing period of 25 minutes per child was videotaped. The

researcher used custom software, as well, and a MIDI controller. At the beginning of the

session, Frewen played the recording for the student. She then asked if they had heard it

before. All of the students in the unfamiliar group responded negatively, and all of the

students in the familiar group responded positively. Then she played a recording of the

same melody with errors and used the Melodic Error Recognition Test Pretest. After this,

Frewen modeled the melody in C major on the keyboard, singing the finger numbers. She

was consistent with her tempo unless the child could not play it that fast, in which case

she matched his or her attempt. She taught them by rote. (Frewen, 2010)

The session was divided into four tests:

1. Frewen played the first two measures, and student played them back twice with
    sound feedback.

2. Without a model, student played back first two measures with no sound
    feedback.

3. Without a model, student's thumb was placed on B rather than C. Student
    played first two measures with sound feedback twice.

4. Frewen modeled all four measures, and student played them back twice with
    sound feedback. (Frewen, 2010)

Following these four tests, students listened to a recording of the melody with

errors and were asked to identify anything "surprising, weird, or unexpected." (MERT

Post-test). (Frewen, 2010) On another day, students were given the "Kaufman

Assessment Battery for Children, the Number Recall subtest and Hand Movement subtest

. . . to assess motor and number sequence memory ability, two types of memory that

seemed particularly relevant for the accurate recall of the sequence of finger

movements." (Frewen, 2010) These results were not significant. (Frewen, 2010)

The results indicated that the students in the Familiar group scored significantly

higher on the correct number of notes played in Test 4 than did the students in the

Unfamiliar group. Analysis also showed that Fourth grade students performed more

correct notes than did the Kindergarten students. Tests 1 through 3 indicated significant

results in favor of familiarity. Frewen notes,

> Overall, children performed better on the post-test (M = 3.3, SD = 2.1) than on the
> pretest (M = 2.9, SD = 2.0), and children in the familiar group identified more
> errors than did children in the unfamiliar group (M= 4.4, SD = 1.7, and M = 1.7,
> SD = 1.4, respectively). A significant three-way interaction was found between
> time (pre- or posttest), grade, and familiarity, F(4, 84) = 2.87, p = .03 (see Figure
> 4). Generally, performance in the posttest was better than in the pretest, the familiar
> group identified more errors, and similar trends are observable across grades.
> (Frewen, 2010)

In discussion, Frewen hypothesizes that the children familiar with the melody had a

reference with which to compare their attempts and could hear errors and self-correct in

order to play correctly, whereas the children unfamiliar with it only had a brief teacher

demonstration during the instruction period. Frewen, based on video analysis, stated that

the familiarity gave students incentive to persevere through their mistakes in order to play

it correctly. (Frewen, 2010)

The increased scores of the Fourth-grade students as compared to Kindergarten

students did not surprise the researcher because developmentally, those results made

sense. No significant differences were found between different sound feedback

conditions. Frewen suggests that the first two measures were simpler, and the sequence

was easily learned. She notes the importance of motor memory for learning keyboard music is demonstrated here. (Frewen, 2010) Frewen summarized the findings by stating, "In this study, familiarity with the test melody prompted greater performance accuracy and melodic error recognition, with older children performing better than younger children." (Frewen, 2010)

Student Musicians' Ear-Playing Ability as a Function of Vernacular Music Experiences.

Robert Woody and Andreas Lehmann conducted a study to "explore the differences" (Woody & Lehmann, 2010) between the ear-playing ability of formal musicians and vernacular musicians. Twenty-four undergraduate music majors were the subjects of this study. Twelve had predominantly participated in traditional school ensembles and formal lessons. Twelve had formal lessons but had also participated in jazz, folk or popular, or church ensembles. They reported, "[E]ach group comprised one pianist, flutist, bassoonist, hornist, and mallet percussionist; two saxophonists and trombonists; and three trumpeters." (Woody & Lehmann, 2010)

In a one-on-one session with a researcher, the students worked with two melodies from a beginning school band method book. Because they were for beginners, the melodies would not be technically difficult for these advanced students. The melodies were played electronically using a MIDI piano sound. Students heard the melody twice, and then they were asked to sing or play it back. (One melody was sung; one was played. The order was random.) They continued listening/attempting until they were able to perform it. The researcher would validate correct performances by verbally encouraging the students. (Woody & Lehmann, 2010)

Once the performance task was complete, the student answered a series of

questions regarding his or her mental processes during the session. Researchers

elaborated, "Specifically, they were asked, 'What do you remember thinking as you

worked with the melodies? Do you recall any strategies you used when learning them?

Think about when you listened and when you sang or played your instrument.'" (Woody

& Lehmann, 2010) They were also asked biographical information regarding their past

learning and playing experiences. (Woody & Lehmann, 2010)

In both playing and singing, vernacular musicians required far less attempts to

perform the melodies than did the formal musicians. Another finding was that for both

formal and vernacular musicians, singing was easier than playing. Surprisingly, however,

the studies' four keyboardists required fewer attempts to play their melodies than to sing

them. The researchers noted, "For vernacular musicians, the average number of playing

trials ($M = 3.83$) was only slightly higher than singing trials ($M = 3.00$). Among

formal musicians, however, there was a much more pronounced difference attributable to

singing trials ($M = 6.42$) when compared with playing trials ($M = 10.58$)." (Woody &

Lehmann, 2010)

The researchers categorized the students' responses to questions into "encoding

(committing the model melody to memory) and instrument production (learning to play

the melody)." (Woody & Lehmann, 2010) They used "Lehmann & Ericson's model

(1997) of mental representations; . . . encoding corresponds to goal imaging, and

instrument production corresponds to motor production." (Woody & Lehmann, 2010)

The researchers presented several strategies consistent with both groups, such as

"listening for patterns, . . . mentally divid[ing] the melody into smaller phrases to aid

their encoding, and mentally rehearsing the melody . . . before [performing it]." (Woody

& Lehmann, 2010)

Of particular interest is the difference between the vernacular and formal musicians' perception of the melodies. The vernacular musicians reported that the melodies were predictable, while the formal musicians reported the melodies were, as the researchers cited, "unpredictable or difficult to memorize." (Woody & Lehmann, 2010) Another difference is the approach to listening—vernacular musicians listened for harmonies while formal musicians listened for intervals. Regarding instrument performance differences, the vernacular musicians talked little about thinking about fingering. In contrast, the formal musicians were very preoccupied with fingerings and finding the notes on their instruments.

The researchers visited the interviews with the keyboardists again to see how they processed the melodies. They deduced, "Instead of primarily encoding the aural characteristics of a melody, it may have been more expeditious for them to remember the sequence of keys or bars traversed by the melody." (Woody & Lehmann, 2010) The xylophonist indicated he "tried to air stroke it' as the model melody played." (Woody & Lehmann, 2010)

The researchers concluded that the cognitive skills needed to play by ear were developed in the vernacular musicians through their musical activities, while the formal musicians did not develop these skills. This accounted for the sizeable difference in their abilities to perform the melodies by ear. The vernacular musicians could transfer the goal image to motor production more easily than could the formal musicians. The researchers called for more emphasis on ear playing in formal music education, not only for the increased advantage for the present, but also for the longevity of music participation of

students. They point out that a band student might not pick up his instrument again after

high school if his only experience playing is reading notation and following the director.

Encouraging ear-playing and student-led collaboration in these formal settings will foster

an environment where the gap between formal and vernacular musicians' ear-playing

ability could virtually disappear. (Woody & Lehmann, 2010)

Chapter Two
The Faults in Current Piano Methods

Experience

The piano teacher sees many levels of music aptitude across a career. Good teachers strive to equip every student with skills that will enable him or her to improve and to achieve realistic goals. It is impossible to formulate a series of steps that will work for every individual student. In a private lesson setting, the best approach is to provide the student with the skills and knowledge he or she needs to succeed once lessons have ceased. As students mature, the teacher can re-assess in order to help guide the student. Most beginning piano methods, as noted by Frewen, lack a listening component. Beyond the lack of listening in the methods, the literature for beginners is often centered around C4 (based on keyboard location), with many melodies venturing down to F3. Because this literature's goal is to teach piano playing, many teachers do not notice a distinct problem with this format.

The problem becomes evident when a teacher begins a more vocal and ear-based approach to piano lessons. Dr. Ken Phillips notes a first-grade range of C4 - C5, (Phillips, 2014) which is supported by Dr. John Feierabend's teaching that the key of F major is ideal for children's singing voices. (Feierabend, 2019) Of course, the songs vary, but many of them center Do between a lower Sol and a higher Sol, which would endorse F major as the ideal key for those songs. For songs in which Sol is the center, then C major would be a better key.

Many piano methods do not introduce songs with sharps or flats for a long period of time to reduce the cognitive load on a student. However, the musicality of the student outweighs any temporary cognitive burden, which can be dealt with quite easily. A piano

method employing a musical singing range as defined by Dr. Phillips, incorporating repertoire listening as well as sight-singing, and ear-playing and improvisation opportunities could revolutionize the way children are taught to play the piano.

So many adults have confided to teachers, "I used to take lessons when I was a kid, but I cannot play the piano." Even more have said, "I cannot hold a tune in a bucket." Of course, this problem is not limited to piano players, but also to the great majority of adult Americans who consider themselves to be "tone deaf," as noted in the literature review. (Wise & Slobada, 2008) America as a nation has been trending towards marginalizing those with the "gift" of music, seeing music as talent only given to a few. Entertainment programming such as "American Idol," where a singer is picked apart by judges and critiqued for every imperfection further isolates those who feel that they "cannot" sing.

In other cultures, music is seen as a community activity in which every member participates in a meaningful way. (Campbell, 2004) Some American music educators have noticed this discrepancy and have begun a crusade to help give music back to the people as a whole. (Palmer & Quadros, 2012) Music educators can provide students with skill sets that enable them to be life-long musicians, not just notation readers.

Piano lessons in particular tend to be given to this notation-based learning. While notation is good to share ideas and to read the ideas of others and playing based on notation is an excellent skill for any musician, it should not be the exclusive means of music making for students. By combining formal piano instruction with solfege sight-singing, listening, and tonal and rhythm pattern-singing and playing, young pianists will acquire the life-long skills to self-accompany, play by ear, sing on pitch, and play and

sing by notation.

Chapter Three
Piano Method Proposal

Lesson Format

The private piano lesson format varies because of many factors. Age of student, musical background of student, purpose for lessons, and learning style of student weigh heavily into the decision-making process for the piano teacher. Although piano teachers have students ranging in age from preschool through adult, this proposal will focus on a method for young students to develop musicality beyond piano skills.

Listening. Based on Dr. Edwin Gordon's *Learning Sequences in Music: A Contemporary Music Learning Theory* as well as research of their own, Dr. John Feierabend *(Conversational Solfege)* and Drs. Christopher Azarra & Richard Grunow *(Developing Musicianship through Improvisation)* have written methods of application. One of the most important components of these methods is the building of repertoire through listening. Young children can absorb much more than they can perform. Therefore, a playlist or CD of tunes should be provided to the parents at the first lesson with the assignment of listening daily.

Patterns. Dr. Gordon noted that young children learn music in the same way they learn language. He suggested that as words are made of combinations of letters (patterns), so musical phrases are made of combinations of tones and rhythms (patterns). (Gordon, 2012, p. ix) At the beginning of the lesson, the teacher should spend a few minutes on pattern echo, both tonal and rhythmic. Since lessons are one-on-one, the student's response can be easily assessed for accuracy. Rather than pointing out if the student misses, the teacher should simply repeat the pattern. If, after several attempts, the child is still not on pitch (tonal), the teacher should evaluate if the child imitated the melodic

contour of the pattern. If so, the teacher should move on to another easier pattern. (Reifinger Jr., 2009) Students will improve on pitch accuracy over time if the teacher keeps a light, happy, and encouraging approach. Reacting to wrong pitches with any negative body language or speech will teach the student to be timid. Rhythm patterns tend to be easier for students, and for that reason it might be nice to have a rhythm-tonal-rhythm order. (Feierabend J. M., 2001) For especially young students or those who seem to speak the tonal patterns rather than sing them back, a different approach imitating animal sounds has been effective. (Feierabend J. , 2006, p. 14) For instance, the teacher should make sliding tones with a cat or dog howl sound and ask the child to copy. Then the teacher should "meow" or "howl" the pattern or melody to be imitated.

Rote/Ear Development. After patterns, the teacher can segue immediately into rote teaching and ear development. Dr. Feierabend is writing a book on how to teach piano, and this in particular is based on an idea that he communicated. (Feierabend J. M., 2019) A simple Do-Re-Mi song in duple meter like "Hot Cross Buns" is an excellent beginning song. Not only is it easy for children to imitate, it also has a simple I-V bass line. After singing the lyrics and having the child echo several times, the teacher sings "Mi-Re-Do" and gestures for the child to sing it back. Then the teacher should play A5, G4, F4, gesturing for the student to copy that. When the student plays it correctly with one hand, the teacher should ask the student to play it with the other. As the student is able to imitate and retain phrases, the teacher can move on to the rest of the song.

Once the student can easily play the melody (usually over several lessons, but some students may learn faster), the teacher can play the bass line underneath. The next step is to sing the bass line and have the student echo. The teacher should then

demonstrate it on the keyboard using the thumb of each hand (Left Hand 1 on C4, Right

Hand 1 on F4). Once the student feels confident with the bass line, usually after a lesson

or two, the teacher can play the melody over the student's bass line and then switch so the

student plays the melody over the teacher's bass line.

The next thing to do is to help the student play the bass line with just the left hand

using finger 4 on C3 and finger 1 on F3. Then the student can learn to play the bass line

under the right hand melody. This should be gently demonstrated phrase by phrase. Once

this song is mastered in these three ways, another Do-Re-Mi song, but with triple meter,

should be introduced. After two songs with Do-Re-Mi and a I-V bass line have been

mastered, then, following Feierabend's order in *Conversational Solfege,* two Do-Re-Mi-

Sol songs with a I-V bass line should be used. This format should continue until the

student is playing all the notes in the major scale and would eventually include IV and

perhaps vi in the bass line.

Improvisation. This segment of lesson time can be very short, less than five

minutes. Here the teacher chooses a key to play an accompaniment. Each week the

accompaniment should be in varied keys and styles. For instance, the teacher could use a

striding pattern in C Major one week and an arpeggiated pattern in A Minor the next.

Using differing chord progressions and accompaniment patterns will inspire the student

and keep his or her interest. The pentatonic scale is easy to use on all black keys; the

teacher can choose D Flat Major, G Flat Major, or B Major to play the accompaniment.

The teacher should place the child's hands on the first five notes of the major

scale or minor scale or instruct the child to use only the black keys. Then the teacher

should ask the student to listen to the accompaniment for a while, and to add his or her

own notes using the keys under the fingers. If the student is timid, the teacher should demonstrate, explaining that no note is wrong in this exercise. If a student plays some notes, the teacher should encourage and praise the child to keep at it.

Another way to teach early improvisation is to play the copy-cat game. The teacher should play two notes that the student should copy. Then the teacher should ask the student to go first. The teacher's initial notes can increase in length and complexity to parallel the student's growing understanding and ability. As the student acquires tunes, playing accompaniments that demonstrate improvising the tunes they know is also a valuable exercise.

Posture/Technique. Proper posture and technique can be encouraged very early. Utilizing imagery such as rainbows and spider fangs is especially helpful to young students. The teacher can demonstrate, like many method books already do, the proper distance from the keyboard using extended arms with fists on the fallboard. Then the teacher should demonstrate how the elbow makes an "L," the wrists remain strong and straight, and the fingers make rainbows or spider fangs, although thumb is lazy and always lays down.

The "tippy exercise" is an excellent way for young students to learn good form. After the student does the aforementioned posture check, then he or she plays any five keys on the piano with one hand, making sure thumb is lazy and the other fingers are playing on their "tippies." One very bad habit that many beginning students display is to play finger 5 on the side of the hand (like a karate chop) or using the downward weight of the arm, bending the wrist. During the "tippy exercise," the teacher can focus on just the students' form and correct any issues weekly. The hands should always play separately

for the tippy exercise, as the eyes of the student should be watching his or her fingers to be sure they are playing correctly. This exercise should be a daily assignment and observed at each lesson until the correct posture is intuitive.

Another technique habit that is good to instill is how to put the hands on and take them off the keyboard. The teacher should explain that when a student sits to play, after the posture check, that the student should think about what he or she is about to play and where the hands go. Then they should lift their hands from the lap and place them in the proper place. After playing, the student should lift the hands, make a rainbow motion up, and down into the lap. The teacher should tell the student that this lets everyone know that the piece is finished. Other technique points, such as articulation and phrasing, should be taught in the context of repertoire.

Scales. Many piano methods delay the introduction of the major scale for several years. However, the teacher can introduce the scales in the following gentle way from the first or second lesson. First of all, the teacher should take the right hand and play fingers 2 and 3 on C-Sharp4 and D-Sharp4. Then the teacher should slide the thumb down to C4 while fingers 2 and 3 slide down to D4 and E4. The teacher should then sing "Do-Re-Mi," and gesture for the student to echo. Once the student echoes by voice, the teacher should immediately sing "One-Two-Three" while playing C-D-E. Then the teacher should demonstrate the whole thing again, from placing the fingers, singing the solfege, to singing the finger numbers. Then the teacher should ask the student to try it, repeating demonstrations as necessary.

Keeping the right hand thumb on C, the teacher should bring up the left hand and "tag" the right hand thumb. At this point, the teacher's right hand should drop to the lap

as the left hand thumb is now going to have a turn. The teacher should sing "Do-Ti-La,"
but sing the pitches C5, B5, and A5. Then the teacher should play and sing the finger
numbers "One-Two-Three" as with the right hand, but play C4, B4, and A4. Then the
teacher should demonstrate the whole thing again, from placing the fingers, singing the
solfege, to singing the finger numbers. Then the teacher should ask the student to try it,
repeating demonstrations as necessary.

Some students might be ready for more than that at first introduction, but some
will only be able to do that for one or two weeks. Once they can locate and play the first
three notes with each hand, then the teacher sings "Do-Re-Mi-Fa," and asks for an echo.
When it is time to sing the finger numbers and demonstrate on the keyboard, the teacher
should pivot the thumb several times very obviously for the student to see that finger 1
will be "cutting in line" and taking another turn. The teacher should sing "One-Two-
Three-One" while playing C-D-E-F. This process should be repeated for the left hand
singing "Do-Ti-La-Sol," playing C-B-A-G, singing (up an octave when descending from
Middle C) "One-Two-Three-One."

The teacher can allow the students two or three weeks with just this much, as
well. Then the teacher can say, "Now that finger one has taken an extra turn, all the other
fingers want a chance!" The teacher should sing the entire ascending scale, asking the
student to echo. Then the teacher should place the right hand down and play as before,
but after turning under the thumb, lay all the fingers out at once and play them quickly,
singing the numbers quickly. The purpose for this is to help the student see that after the
thumb turns under, all the rest of the fingers play until they are used up. Then the teacher
can play it again more slowly, asking the student to copy. Repeating the process for the

left hand, the scale is learned. The teacher should then tell the student, "Congratulations, you have just played the C-Major scale." This will take a few weeks to cement, but it is a great technique builder, even for very young students.

The teacher should ask the student to count the notes in the scale. Once the student understands that there are eight notes, some simple addition will aid in reversing the scale. The teacher should tell the student, "Now, let's go back the way we came!" Demonstrating with the right hand, the teacher tells the student, "When we start with finger 5, we use them all up. Then we have to add 3 to get all 8, so finger 3 jumps over the thumb." The teacher should do this a few times before asking the student to copy. Of course, this should be repeated with the left hand.

After the student is comfortable playing the scale ascending and descending, the teacher can say, "Did you know that the Major scale has a cousin? Its cousin's name is Minor. To find the cousin of C-Major scale, we have to sing and play it, stopping when we get to La." The teacher should demonstrate by playing the descending C-major scale with the left hand, stopping at La. The teacher should then sing the ascending A Natural Minor Scale in solfege, beginning on La, letting the student echo. The teacher should then place the student's right hand thumb on A4 and say, "Now, play the same way you played C-major scale, but start and end on La." If the student seems unsure, then the teacher should demonstrate. This scale should be much easier to learn because the student's motor memory should be engaged. The teacher should introduce additional scales once the student has mastered the first two, allowing very young students to play their hands separately for a long time. Teachers should introduce different fingerings based on finger length so the student understands the reason for the change. For instance,

"Fingers 1 and 5 are very short. Playing the black keys is much easier with fingers 2, 3, and 4. Therefore, we only use 2, 3, and 4 on black keys in a scale."

Literacy. Many piano methods utilize notes without a staff to introduce music notation. This is very effective and reduces the cognitive load of the student while thinking of placement, finger numbers, and note names. It allows the student to see melodic contour without the intimidation factor of the Grand Staff. A further advantage to starting students this way would be demonstrating how the melody can be placed anywhere on the staff (once it is introduced) because Do moves around. In the beginning, the staffless notation should be the melody to the same song introduced by ear. Because the student worked with this melody by ear, once the teacher points to the contour and sings it, the student should be able to copy that skill—hearing AND seeing how the sounds go "up" and "down" with the notes. To help students understand that F is not always Do, the song should be played in F Major, G Major, and C Major. The teacher should introduce the new "backyard" for the melody by stating, "Ok, now 'Hot Cross Buns' wants to go play next door, in G Major's backyard. Bye, bye, F Major!"

Pictures with hand positions would be most helpful for parents to facilitate practice at home. Finger numbers should be reinforced through brief exercises, such as touching right to left fingers (tapping both finger 1's together), with a rounded hand position on their "tippies." This helps not only finger number retention but also technique.

The music alphabet can be introduced like many methods do, with pictures of a keyboard for students to circle the two and three black-key groups, teaching each key in relation to them. After this has been established, the Grand Staff could be introduced.

Since the Grand Staff originally had the Middle C line connecting the two, the evolution

of the staff might help students see why music is notated that way.

Showing the student all eleven lines and asking if that looked easy to navigate, the

teacher could say, "You are right! This would be very hard to read!" Then the teacher

could show the student the blank grand staff (no clefs, bar line, or brace) with the space

between it, saying, "They erased the middle line! Now doesn't that look easier?"

Some method books give the history behind the Treble and Bass clef signs (G clef

and F clef), and that is most helpful. At this point, the teacher should draw the G clef and

demonstrate how that is a very fancy G. Then the teacher should immediately draw a G

whole note and say, "This is *Marker G* because it is the note marked by the G clef." The

teacher should trace the G line through the clef sign and the note to demonstrate the

connection. Drawing the F clef, the teacher should explain that it is a very fancy *F*.

Drawing a whole note on the F line, the teacher should say, "This is *Marker F* because it

is the note marked by the F clef." The teacher should trace the F line through the clef sign

and the note to demonstrate the connection. Once those have been established, the teacher

should draw whole notes on F2 and G5, explaining that G5 is *Cherry-on-top-G* and F2 is

Foundation F. The teacher should draw a little cherry stem into the whole note G5. The

teacher should make the F2 note the head of a stick man whose arms curve up to hold up

the Grand Staff with little muscles on the arms, explaining that he is VERY strong.

At this point the student should be given the opportunity to trace the clef signs,

make the four notes, and name them. Then the teacher can move on to other landmarks

on the Grand Staff. Utilizing mirror imagery, the teacher should say, "Let's pretend this

pencil is a paint brush, and these notes I'm making are wet paint." The teacher should

then draw the top half of Middle C in the middle of the Grand Staff. Then the teacher

should draw Treble C and High C (C5 and C6). Then the teacher should say, "Now, this

is wet paint. If I fold this in half right in the middle, what would we see?" The teacher

should then finish drawing Middle C, Bass C and Low C (C3 and C2). Then the teacher

should explain that these are all C's, labeling each one, top to bottom, High C, Treble C,

Middle C, Bass C, and Low C. Once again, the student should be given the opportunity to

copy that.

One last set of landmarks is all that is necessary for a long time. The teacher

should explain that the Treble Clef represents high notes, and that the face of a person is

high, not close to the ground. Then the teacher should draw whole notes onto the Treble

Clef spaces in a diagonal ascending pattern. Putting small dots for eyeballs into the A5

and C5 notes, the teacher should then draw a face circle flush with the F4 and E5 notes,

the notes representing the ears. Then the teacher should finish the face by adding

eyebrows, a nose, hair, and a mouth. "We call this the Treble Space FACE because these

spaces spell F-A-C-E." Moving to the Bass Clef, the teacher should explain that cows eat

grass from the ground, down low, and that the Bass Clef represents low sounds. Then the

teacher should draw the same diagonal pattern of ascending whole notes on the Bass

Clef. Then, writing the words beside each whole note, the teacher should say, "All Cows

Eat Grass." Then the teacher should explain that the first letter of each word names the

note, saying, "This is the Bass Space Cows' Diet because the spaces tell us, 'All Cows

Eat Grass.'" The student should be encouraged to copy these landmarks, as well. This

could be a series of homework assignments rather than taking up lesson time.

Once the Grand Staff has been introduced and the landmarks have been

established, then the first song (melody and bass line, as separate entities) can be placed on the Grand Staff in all three "backyards," on both staves (six total locations). This should only have one hand at a time, so the Grand Staff can be divided for ease into separate Treble and Bass Staves. In this case, the lyrics underneath the notes should read the actual note names so the student can sing them as he or she plays them. By this time the student should know the song in all three locations, so the association of the note name in relation to the staff and the playing of a song can become established easily. Dr. Feierabend has commented in his workshops on *Conversational Solfege* that learning should be effortless. (Feierabend J. M., 2019) This proposed method attempts to promote effortless learning in that spirit.

After that, the Grand Staff should be introduced with the melody over the bass line. The teacher should draw light lines down through the notes that happen at the same moment to demonstrate that they are played together. Consecutive songs should be taught in the same manner, first by rote, then by staffless melodic contours sung and played using solfege in different "backyards" on the keyboard, transferring to the Treble and Bass staves after mastery, and singing note names to the already very familiar melodies. One very important thing to note about song choices is Christmas music. Christmas carols should be sung, but all of the current method Christmas books available center everything on Middle C. This makes most songs very hard for singing. A series of Christmas carols should be available using this proposed method. Every song chosen for beginning piano literature should be a good singing song. This way, literacy is learned easily while developing the singing voice.

Once the students have reached the point of playing/reading all the notes in the

major scale as mentioned in the Rote/Ear Development section, the method should begin

to incorporate some literature by the masters. Many great composers wrote music for

their own children or students who were very young. The teacher should build excitement

about the occasion when the student reaches the point he or she can learn a piece of piano

literature. The teacher should point to the melody on the notation and sing it using

solfege, phrase by phrase, and have the student echo. The student should be familiar with

the melody before attempting to play it. The teacher should not be hesitant to demonstrate

it for the student on the keyboard if the student asks.

Chords. Once this milestone has arrived, and the student can begin learning the

primary chords of the scales he or she has mastered parallel to learning piano literature.

Since the student will have played the bass lines for all of the songs so far, the teacher

can explain that the notes of the bass line are roots for chords. Teacher demonstration

should be heavy in the chord introduction phase.

The teacher should draw out the C Major scale on the Grand Staff for both hands,

ascending only. Then the teacher should say, "Okay, let's number the scale tones."

Beginning at C, the teacher should sing as she or he writes, "One, two, three, four, five,

six, seven, _____." Many times the student will sing "eight" if the teacher waits. This

is the perfect opportunity to explain that although it is eight notes apart, the higher Do is

called "one."

Once the scale tones have been labeled, then a lesson on Roman Numerals must

usually follow. Once again, simple addition easily explains the system of Roman

Numerals. The teacher, drawing the "stick," should ask, "How many sticks do you see?"

When the student answers, "one," the teacher should draw another right next to it, then

another, eliciting that each added stick is another consecutive number higher. Then the

teacher should say, "To avoid having to count sticks beyond three, the Romans used a V

to represent five. Now, instead of adding, they are going to subtract a one from five to get

four." Demonstrating while teaching, the teacher should then ask, "How do you think

they represent six?" Hopefully the student will deduce that adding a one to the five is

how they get six. Demonstrate all the way to eight. Students particularly interested might

enjoy knowing that X represents ten, but since only up to eight is needed for music, that

is up to the teacher. Since the student is already familiar with the concept of minor, and

the scale is being labeled, the teacher could mention that upper case Roman Numerals

mean Major while lower case Roman Numerals mean Minor.

Writing out the Roman numerals underneath the C, F, and G on each staff, the

teacher should say, "Chords look like snowmen on top of their roots." Then the teacher

should draw the I, IV, and V chords for the student to see, and playing each as they are

drawn. After that, the teacher should point to the I chord and play it and ask, "What tones

are in this chord?" Then the teacher should slowly play C-E-G and sing "Do-Mi-Sol." At

this point the teacher should invite the student to copy. The teacher should assign

practicing the chords with individual tones, followed by sounding all three at once if the

student can manage it, for a week, and then the next week can demonstrate how

impractical it is to jump around to the chords.

This awkward jumping is the perfect way to introduce voice leading through the

primary chord cadences. The teacher should point to the primary chord triads and ask,

"What notes are in common with the I and IV chords?" Then the teacher should draw a

little arrow from the C5 of the IV chord down to Middle C. "What if we moved this C

down here? Would it still be a IV chord?" The teacher should draw the I chord followed

by the IV^6_4 chord, playing and singing the solfege tones for the student. Demonstrating

the jump from the I to IV chords and then the ease of the I to the inverted IV chord, the

teacher should ask, "Which one seems smoother and easier?" The teacher should assign

the I-IV practice for a week or two before introducing the inverted V chord in the same

way.

        Lead Sheets. After mastering the primary chord cadences in C Major, the student

should be ready to transfer that knowledge to the songs already learned in lead sheet

format. The first lead sheet the teacher uses should be the first song the student learned,

"Hot Cross Buns." The teacher should say, "Now we know this song well, don't we?"

Then the teacher should point to the chord symbols above it and say, "Remember the C

chord and G chord we just learned? When you see a C above the staff, that means to play

a C chord." The teacher should demonstrate for the student and ask while pointing to the

G, "What do you think you should play here?" The student should have a week to play

that before transferring the primary cadences to F Major's "backyard." The teacher

should let the student play "Hot Cross Buns" with the lead sheet in all three keys. Once

the student can do that, then the other songs, and any additional chords included in them,

can be introduced in the same manner. Even though the songs are simple, the student has

now learned to sing and play by ear, learned how to read and write notation, begun

playing piano literature, and learned how to read a lead sheet.

        This method proposal is very labor intensive for the teacher. Therefore, in order to

facilitate implementation, the method should be in book format and the listening

repertoire should be bundled into a playlist or CD. If the teacher can simply open the

book and begin without having to write out all the notation and search for listening tunes,

then he or she could spend more time teaching because the preparation has been done.

This is one reason piano lessons have continued to be the same for so many years. It is

impossible for teachers to do all of this in a thirty-minute lesson slot unless it is already

laid out.

Access Piano Method Map
B Series is parallel to allow for different tunes for siblings or teacher sanity.
Young students will take longer than older students. **Piano lessons should be**
individualized to student pace.

Series A Book 1
        C Major Scale, contrary and parallel *(taught incrementally)*
        A Minor Scale, contrary and parallel *(taught incrementally after C Major)*
        Duple *Do Re Mi* Staffless: "Hot Cross Buns"
        Triple *Do Re Mi* Staffless: *"Fais Do Do"*
        Duple *Do Re Mi Sol* Staffless: "I Have a Dog"
        Triple *Do Re Mi Sol* Staffless: "Johnny Works with One Hammer"

Series A Book 2
        C Major Scale, contrary and parallel *(taught incrementally)*
        A Minor Scale, contrary and parallel *(taught incrementally after C Major)*
        Keyboard and Staff Introduction
        Duple *Do Re Mi* Grand Staff: "Hot Cross Buns"
        Triple *Do Re Mi* Grand Staff: *"Fais Do Do"*
        Duple *Do Re Mi Sol* Grand Staff: "I Have a Dog"
        Triple *Do Re Mi Sol* Grand Staff: "Johnny Works with One Hammer"

Series A Book 3
        F Major Scale, Parallel *(taught incrementally)*
        D Minor Scale, Parallel *(taught incrementally)*
        G Major Scale, Parallel *(taught incrementally)*
        E Minor Scale, Parallel *(taught incrementally)*
        Duple *Do Re Mi Sol La:* "Great Big House"
        Triple *Do Re Mi Sol La:* "Morning"
        Duple *Do Re Mi Fa Sol:* "Cobbler, Cobbler"
        Triple *Do Re Mi Fa Sol:* "Oats, Peas, Beans"
        Duple *Do Re Mi Fa Sol La: "Ah! Vous Dirais-je, Maman"*
        Triple *Do Re Mi Fa Sol La:* "Fiddle Dee Dee"

Series A Book 4
        B Flat Major Scale *(taught incrementally)*
        G Minor Scale *(taught incrementally)*
        D Major Scale *(taught incrementally)*
        B Minor Scale *(taught incrementally)*
        Notation Reference Guide
        Literature Introduction:
                Teacher-chosen pieces from *Succeeding with the Masters: The Festival*
                Collection, Preparatory by Helen Marlais

Access Piano Method Map, *Continued*

Series A Book 4, *continued*

      Chord Introduction
            (Mostly by demonstration/copying. Introduced incrementally as needed for
            repertoire.)
      Lead Sheets *(Repertoire from Books 1-3)*
            Duple *Do Re Mi*: "Hot Cross Buns"
            Triple *Do Re Mi*: *"Fais Do Do"*
            Duple *Do Re Mi Sol*: "I Have a Dog"
            Triple *Do Re Mi Sol*: "Johnny Works with One Hammer"
            Duple *Do Re Mi Sol La:* "Great Big House"
            Duple *Do Re Mi Fa Sol:* "Cobbler, Cobbler"
            Triple *Do Re Mi Fa Sol:* "Oats, Peas, Beans"
            Duple *Do Re Mi Fa Sol La: "Ah! Vous Dirais-je, Maman"*
            Triple *Do Re Mi Fa Sol La:* "Fiddle Dee Dee"
            Triple *Do Re Mi Sol La:* "Morning" *(skipped at first due to more complex*
            harmony)

Christmas Carols
*(Each carol is arranged for every level so that students can play Christmas music. Carols
are designed to fit into the lesson as new repertoire. They can be included in repertoire
review if desired. Sequence should pause for Christmas carols and resume once
Christmas is over. Reviewing repertoire and scales should be included, however.)*
      Jolly Old Saint Nicholas
      Silent Night
      Jingle Bells
      Joy to the World
      Up on the Housetop
      What Child Is This?

After completion of Book 4, Review of repertoire, scales, and literature should continue.
Add new literature following the same plan. F
The series could continue with songs in minor keys, more complex harmonic structure,
and a focus on developing accompaniment skills along with the literature.
or further improvisation development, student will be ready for ***Developimg
Musicianship through Improvisation*** by Azzara & Grunow, published by GIA.
Additional literature can be found in the following books in the series: ***Succeeding with
the Masters: The Festival Collectio****n,*by Helen Marlais, published by FJH.
Another source is ***Easy Piano Classics*** by James Bastien.
Add contemporary tunes using ***River Flows in You and Other Eloquent Songs for Piano***
published by Hal Leonard.

Chapter Four
Access Piano Method

Acknowledgements

This piano method was born out of over twenty-five years of private piano, general music, and choral instruction. While in graduate school at Gordon College, I began to attempt to apply what I was learning about Edwin Gordon's Music Learning Theory through Azarra & Grunow's *Developing Musicianship through Improvisation* and Feierabend's *Conversational Solfege.* I began to notice that applying these ideas with the current piano methods was quite difficult because they are written for piano instruction, not singing. Too busy to write for individual students, I used the method books and applied what I could.

Having to write a thesis for my master's degree in music education, I decided this was the perfect opportunity to create a method that applied Music Learning Theory to the piano. Special thanks to Dr. Sandra Doneski and Kristen Harrington, as well as to all the professors that influenced me there. I would also like to thank my cohort, Class of 2021, whose love, support, and encouragement made my time at Gordon feel like another home.

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Note to teachers and parents

Piano lessons tend to be given to notation-based learning. While notation is good to share one's musical ideas and to read the ideas of others and playing based on notation is an excellent skill for any musician, it should not be the exclusive means of music making for students. By combining formal piano instruction with solfege sight-singing, listening, and tonal and rhythm pattern-singing and playing, young pianists will acquire the life-long skills to self-accompany, play by ear, sing on pitch, and play and sing by notation. The *Access Piano Method* seeks to apply research in children's vocal pedagogy and the decades of research and application of Music Learning Theory men like Gordon, Azarra & Grunow, and Feierabend have provided, to piano pedagogy in order to inspire a new generation of pianists who are tuneful, artful, and beatful for life.

How to use this method

This method is set in a series of four books so far, with each lesson laid out. Though some material may look repeated, the importance of having lesson units together with no "page flipping" is essential to facilitate maximized teaching time per lesson and frustration-free practicing at home. In addition, pencil activities are included on many "repeated" items, which makes them more valuable.

Because sometimes siblings begin lessons at the same time, I am providing an A Series and a B Series. Please start siblings on different series. This is important so that one child is not discouraged if his or her sibling learns a song faster. If they are different, then it removes the potential for discouragement. There is a link for parents to use so their children can listen to the songs and pieces in order to build a library of tunes. This is especially important and should not be neglected. Because of the importance of listening, each practice log will have a checklist for daily listening, as well.

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