

THE EFFECTS OF IMMERSION AND PHRASE-BY-PHRASE
LEARNING ON ELEMENTARY STUDENTS'
SONG ACQUISITION

by

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CHAPTER I

INTRODUCTION

Because singing and song learning consume the most instructional time in the elementary music classroom (Mizener, 2004), it is important to further study and understand the most effective song learning techniques. Currently there is a lack of research conducted to investigate specific teaching procedures on song acquisition and song accuracy (Kerr & Persellin, 2004) and how that relates to student accuracy and preference. This study will strive to enhance the knowledge and information that is available to teachers and allow them to make more informed decisions regarding the teaching of songs.

CHAPTER II

REVIEW OF LITERATURE

There are two main ways to teach a song in the classroom: by rote or by notation (Klinger, Campbell & Goolsby, 1998). When students learn a song by notation they are reading the notes on the page. This means they actually translate the printed notes into the sounds for which they stand, without ever having heard the song played or sung (Grant, 1960). Learning a song by rote can mean learning a song by ear, imitation, or repetition. Typically, the teacher sings the song repeatedly to the class. This is usually done with or without the words in front of the students.

Songs learned by rote are taught through two general methods. The first method is called “the whole song method” (Grant, 1960; Gelineau, 1976; Herrold, 1991; Harrison, 1983; Rozmajazl & Boyer-White, 1992) and the second method is called phrase-by-phrase method (Gelineau, 1976; Grant 1960; Greenberg & MacGregor, 1972). Some authors have referred to the whole song method as “immersion” (Klinger, Campbell, & Goolsby, 1998). In other words, students are completely immersed in the song. In some studies, the term “holistic” also has been used to refer to this same idea (Mirsha, 2002; Gault, 2002). For the purposes of this study the terms immersion and phrase-by-phrase will be used.

Immersion and phrase-by-phrase methods have been widely used for many years. Parks Grant (1960) and R. Phyllis Gelineau (1976), both address the rote song approach and specifically the two ideas, immersion and phrase-by-phrase. Klinger, Campbell and Goolsby (1998), in more recent research, also address the use of both methods. All of the

author's accounts are very similar. The methods reflect their names. Immersion presents the song in its entirety repeatedly, always from beginning to end. The phrase-by-phrase method fragments the song in order to then gradually connect the phrases.

Grant (1960) stated that a song containing little or no musical repetition, or one which is difficult is usually easier to teach phrase-by-phrase. Grant also contended that educators found musical retention to be higher when using immersion and that a song should be taught phrase-by-phrase if it is to be remembered for only a short time. He felt many teachers used phrase-by-phrase most often because the students seemed to quickly pick up the song. Klinger, Campbell and Goolsby (1998) verified this idea by comparing the immersion method and the phrase-by-phrase method. Two second-grade classes were taught two similar folksongs using both methods; the researchers reversed the methods with the second class. Children made significantly fewer errors in songs taught to them through immersion. The researchers suggested that repeated exposure to a song in its entirety led to more of a connection between the song's melody and story line.

Barnes (1999) sought to replicate the Klinger, Campbell and Goolsby (1998) study but conducted her study with different songs and a slightly different phrase-by-phrase approach. Her study yielded very similar results that favored the immersion approach. When exploring preliminary information for the current study, Sorrells (2004) sent a survey to local elementary teachers. The survey gathered information concerning teacher's choice song learning methods in the classroom. Of the surveys returned, 100% said they always used phrase-by-phrase. How might this new information collected by

Barnes (1999) and Klinger, Campbell and Goolsby (1998) fit into what teachers are choosing to use in their classroom?

Studying children in their most natural environment uncovers clues to the understanding of the child's mind (Campbell, 1998). Children most frequently sing a song repeatedly with their friends when they are at play. As a result, the other children just pick up on the song after they have heard it several times. This transmission of songs to each other is a natural "playground" practice (Harwood, 1987). If children naturally choose to transmit songs using the immersion approach, do they prefer this approach in the classroom? The issue of song learning preference raises questions, particularly whether one method may be more preferred over another.

There have been other studies concerning student preferences in the classroom. Siebenaler (1997), Gregory (1994), Killian (1990; 1996) and Montgomery (1996) have all conducted research to find out more about student preference. Little research has been conducted, however, regarding student preference and song learning techniques. Perhaps there is a link between student preferences and learning ability. We have yet to see how much of this connection might turn out to be important information. If a student likes or prefers the way a teacher presents the material, it might positively affect the student's ability to learn the material. So therefore, if students were able to identify their preferences it would be beneficial to see how that affects their learning.

This study was designed to find:

1. Which method, immersion or phrase-by-phrase, produced a fewer number of pitch, rhythm and text errors;

2. Which method, immersion or phrase-by-phrase, students prefer;
3. If musical accuracy was greater when matched to the student preference choice.
(Did the song they learned through their preferred method have fewer errors.)

CHAPTER III

METHODOLOGY

This study consisted of four intact groups of elementary students ($N = 76$), two second-grade classes ($n = 39$) and two fifth-grade classes ($n = 37$). All four groups are from the same elementary school made up of middle class families with 3% of the children receiving free lunch. Two songs were chosen to teach both second-grade classes: “Let Us Chase the Squirrel” (Klinger, Campbell & Goolsby, 1998; Erdei, 1974) and “Who’s That Tapping at My Window” (Erdei, 1974). The first song “Let Us Chase the Squirrel” is 16 beats long and “Who’s That Tapping at My Window” is double that of the first song, 32 beats long. The two songs are similar in structure, the first, ABAC, and the second song, ABAB, and similar in range, from D above middle C up to A, a fifth higher (Mizener, 2003, 2004; Klinger, Campbell & Goolsby, 1998). Both songs are notated with the beginning pitch “do” on the G line, but the students were instructed to sing D, above middle C as their beginning pitch. This was done in order for the songs to be comfortable in the children’s singing voice (Mizener, 2003). The songs do not contain half-step intervals because younger children tend to sing more in tune when a minor second is avoided (Sinor, 1985).

Two different curricular and age appropriate songs were chosen to teach to the fifth grade classes: “Ida Red” and “Grandma Grunts” (Erdei, 1974). Both songs were chosen because they have similar range and contour. Similar to the second-grade songs chosen, the first song, “Ida Red,” is 16 beats in length and the second song, “Grandma

Grunts,” is 32 beats in length, but the songs are not similar in structure. Both songs are notated with the beginning pitch “do” on the G line, but to be comfortable in the children’s singing voice they were directed to sing D above middle C as their beginning pitch.

Group I, the first group of second and fifth-grade classes, learned the first song through immersion and the second song phrase-by-phrase, while Group II, the second group of second and fifth-grade classes, learned the first song phrase-by-phrase and the second song through immersion. The methods were counterbalanced to determine if there would be a difference between the songs and the methods of teaching (Mizener, 2003, 2004; Klinger, Campbell & Goolsby, 1998). The students learned the songs through the two methods following modified procedures of Klinger, Campbell, & Goolsby (1998) as seen below:

The Immersion Method

1. Teacher sings the entire song to the class.
2. The teacher sings the entire song to the class while the students join in when they are ready.
3. The teacher and students sing the song together two more times.
4. Students sing entire song without teacher.

The Phrase-by-Phrase Method

1. Teacher sings phrase 1, class echoes.
2. Teacher sings phrase 2, class echoes.
3. Teacher sings phrase 3, class echoes.
4. Teacher sings phrase 4, class echoes.
5. Teacher and class sing entire song together.

6. Children sing entire song without teacher

After the students learned each song, the teacher/researcher talked about how the song was presented to them. The students were asked questions like, “How was the way you learned the first song different from the way you learned the second song?” or “How did you learn the first song?” and “How did you learn the second song?” This helped direct the students to think specifically regarding the way they learned the songs. The students did not appear to have any problems answering the above questions. They were clear about the difference between the two ways they learned the songs. After this short discussion, the students were given permission to sit anywhere in the room they felt comfortable in order to think and focus.

Each student was then handed a packet, a pencil, and a student size chalkboard to use as a hard surface to write on. They were asked to place their chalkboard on the floor with the packet and pencil on top. The students were instructed not to open their packet until asked to do so. The packet included a cover sheet followed by four pages. The coversheet included the student’s homeroom teacher, date, and the names of the two songs they learned with an “I” for immersion or “P by P” for phrase-by-phrase next to the corresponding song. The abbreviations were only there to help keep the classes and packets organized. The students were not made aware of the terms and their meanings. Before the students opened the packets, the teacher explained how important it would be for them to take their time and think through each question. The students were then instructed to write their first name at the top of their packet. After everyone wrote their name, the teacher asked them to turn to the first page in their packet. The first page

included question #1, “Which way helped you learn the song the best?” The teacher verbally walked the students through the question to insure the students were clear about what the question was asking. The teacher led the students to think about which song they remembered the best. For example, if the first group of second-graders remembered, “Let Us Chase the Squirrel” well, they should circle the “1st Way,” because they learned that song through immersion. Or if they could sing through “Who’s That Tapping at My Window” in their head and remember it well, then they should choose the “2nd Way.” The teacher verbally walked through question #2, “Which way helped you learn the words the best?” and question #3, “Which way helped you learn the tune the best?” in the same manner. The fourth question, “If you had your choice, which way would you like to learn a new song?” seemed clear enough without explanation. The teacher simply asked the students to think back on both ways they learned the songs and then decide if they could choose, which method they would prefer the teacher to use.

Once everyone was finished answering the first question, together the class turned to the second question and so on until, together, the class reached the end of the packet. Each question was placed on a separate sheet of paper. This was done to help the students focus on one question at a time and not allow their answers to be swayed by prior answers given. The students were also instructed not to turn back to the previous page. This was done to prevent any answer changes. The teacher verbally walked through all four questions using the same procedure described above. This same procedure was used for both second and fifth-grade classes. The students learned the songs and answered the questions the first day.

During the next class period, either one or two days later, according to each class schedule, the students were individually tested. The second day, the students reviewed the songs and made individual recordings. Once the class arrived, they were told to find their seats and sit down. The students were informed they would be individually audio-recorded singing both songs learned the previous day. During the recording, the student would sing a cappella and would not be allowed to look at the music or the words. As a class, the students stood up and sang through both songs twice. The teacher brought the students in with the correct tempo and starting pitch by singing “One, two ready now here you go.” This afforded the students an opportunity to refresh their memory and review any part of the song they might have forgotten.

A substitute teacher stayed in the music portable with the class while they watched a movie. While the students watched a movie, the substitute called students from the class list one by one to go to the art portable next door. Set up on a table in the art room was a small piano, a class list and the audio recording device, an MP3 recorder. In order to prepare for recording the teacher/researcher, the student’s regular music teacher, compiled a list of the students that filled out a packet from the first day and assigned each student a number. Their music teacher/researcher sat at the table while the students stood in front of the table. The teacher turned on the recorder, said the student’s number, played the starting pitch on the piano and sang “One, two ready now here you go.” After the student sang the first song, the teacher said the title of the second song and brought the student in to sing. A substitute also helped with the second group of second-graders and this same recording procedure was followed.

The fifth-graders followed similar procedures on their second day. A substitute was not available to help with the fifth-grade classes. A student teacher from another class helped with the first fifth-grade class, but not the second fifth-grade class. Once the students came in and found their places, they also sang through both songs twice and were informed about what they were doing next. The students watched a movie while the student teacher supervised and called out names. That day the art portable was not available. The weather was nice; therefore, the students one by one went to the outside amphitheater. The students sat outside across from their music teacher/researcher on the seats of the amphitheater to record. The second fifth-grade class did not have someone available to supervise and call out names while they watched a movie. Therefore, the music teacher/researcher was forced to sit right outside the door to record. The class stayed inside, watched the movie, and after each student was finished recording, they went inside and called the next name. Outside the teacher had a tuning fork, in place of a piano, a numbered class list and the MP3 recorder. The teacher turned on the recorder, said the student's number, found the starting pitch from the tuning fork and sang "One, two, ready now here you go." After the student sang the first song, the teacher said the title of the second song and brought the student in to sing.

CHAPTER IV

RESULTS

After all the recordings were compiled, the teacher then evaluated them. Each packet was numbered according to the number given during the recordings. A separate sheet with both songs in notation was stapled to the back of each packet. While the teacher listened to each recording, the errors were circled on the music; pitch errors were circled in green, rhythm errors were circled in blue and text errors were circled in red. Each song was listened to twice to insure correct scoring. After each song, the total errors were tallied. Each song had a different number of total possible errors. “Let Us Chase the Squirrel” included 20 pitch, 25 rhythm, 20 text errors resulting in a total of 70 errors and “Who’s That Tapping at My Window?” included 30 pitch, 31 rhythm (not including the final rest), 22 text errors resulting in a total of 83 errors. “Ida Red” included 30 pitch, 30 rhythm, 25 text errors resulting in a total of 85 errors and “Grandma Grunts” included 32 pitch, 32 rhythm, 25 text errors resulting in a total of 89 errors. For reliability, a trained, experienced music educator independently listened to 10.5% of the recordings. Her scores were then compared to the teacher/researcher’s scores. The scores were in agreement 98.2% of the time using the agreements divided by agreements + disagreements computational method (Madsen & Madsen, 1998).

Table 1 shows the scores for both second-grade classes. The subject’s assigned number is to the far left, followed by the subject’s two scores shown across the table. Each score represents the total number of errors received for that particular song.

Table 1

Both Second-Grade Class Scores

First Second-Grade Class

“Let Us Chase the Squirrel” Immersion

#1	2
#6	2
#8	0
#9	0
#11	2
#12	0
#16	70
#17	1
#18	0
#2	0
#3	16
#4	4
#5	0
#7	4
#10	4
#13	70
#14	52
#15	25
#19	2
#20	12
#21	0

Total 266 immersion Errors

Second Second-Grade Class

“Let Us Chase the Squirrel” P-by-P

#40	0
#45	70
#46	10
#47	4
#48	6
#51	2
#52	8
#54	4
#41	0
#42	47
#43	4
#44	25
#49	0
#50	0
#53	12
#55	0
#56	3
#57	0

Total 195 p-by-p errors

“Who’s That Tapping” P-by-P

4
10
0
0
83
4
63
11
81
4
4
4
37
18
0
2
44
1
0
2
0

Total 372 p-by-p errors

“Who’s That Tapping” Immersion

3
0
0
0
0
1
0
2
0
4
0
6
4
0
0
3
4
4
0

Total 31 immersion errors

For example, in Table 1, subject #1 received a score of 2 for his/her first song learned through immersion and received a score of 4 for his/her second song learned phrase-by-phrase. This means subject #1 only had a total of 2 errors in his/her first song and 4 in his/her second song. The optimum goal would be to receive a score of 0 (zero) for both songs. Looking at Table 1, the first second-grade class had 266 total errors when the subjects sang, “Let us Chase the Squirrel” learned through immersion. They also had 372 total errors when the subjects sang, “Who’s That Tapping at the Window” learned phrase-by-phrase. The second group of second-graders had 195 total errors when the subjects sang, “Let Us Chase the Squirrel” learned through phrase-by-phrase and had 31 total errors for, “Who’s That Tapping at the Window” learned through immersion. As a result, because the songs were counterbalanced across the two classes any possible order effects were distributed equally. Therefore, the two immersion scores and phrase-by-phrase scores can be combined to make one large immersion score, 297, and one large phrase-by-phrase score, 567.

The Chi Square (X^2) statistic was used to examine possible differences between the immersion and phrase-by-phrase scores. There was a significant difference between the number of immersion and phrase-by-phrase errors (Table 2). The second-grade subjects made significantly fewer errors when they sang the songs learned through immersion.

Table 2
Combined Second-Grade Immersion versus Phrase-by-Phrase Scores

Combined second-grade Immersion errors	Combined second-grade phrase-by-phrase errors	X^2	p	C.V.	Result
297	567	84.40	< .001	3.84	Reject Ho

The scores were combined to make two totals, 413 immersion errors, and 689 phrase-by-phrase errors. The results showed a significant difference between the number of immersion and phrase-by-phrase errors (Table 3). Significantly fewer errors were made when the subjects learned the song through immersion.

Table 3
Combined Fifth-Grade Immersion versus Phrase-by-Phrase Scores

Combined fifth-grade Immersion errors	Combined fifth-grade phrase-by-phrase errors	X ²	p	C.V.	Result
413	689	69.13	< .001	3.84	Reject Ho

In order to see if the subject's scores were lower through their preferred method, the immersion scores of the subjects that preferred immersion and the phrase-by-phrase scores of the subjects that preferred immersion were analyzed (Table 4).

Table 4
Second-Grade Preferred Immersion versus Non-Preferred Phrase-by-Phrase Scores

Immersion scores (preferred)	P-by-P scores (non-preferred)	X ²	p	C.V.	Results
83	360	173.20	< .001	3.84	Reject Ho

The results show the subjects that preferred the immersion method had significantly fewer errors when they sang the song learned through their preferred method, immersion. Table 5 displays the immersion and phrase-by-phrase errors for both fifth-grade classes. The second-grade scores are separated by preference in Tables 6 and 7.

Table 5

Both Fifth-Grade Class Scores

First Fifth-Grade Class

“Ida Red” Immersion

#23	2
#24	0
#25	5
#28	30
#29	60
#31	3
#33	30
#36	2
#37	17
#22	7
#26	54
#27	0
#30	2
#32	62
#34	1
#35	2
#38	27
#39	0

Total 304 immersion errors

“Grandma Grunts” Phrase-by-Phrase

76
26
7
59
1
7
32
59
31
38
2
75
1
36
43
2
43
16

Total 554 p-by-p errors

Second Fifth-Grade Class

“Ida Red” Phrase-by-Phrase

#60	7
#65	33
#67	0
#68	2
#69	1
#58	3
#59	23
#61	5
#62	0
#63	0
#64	0
#66	0
#70	0
#71	2
#72	6
#73	14
#74	30
#75	0
#76	9

Total 135 phrase-by-phrase errors

“Grandma Grunts” Immersion

2
34
0
5
2
2
0
0
0
32
2
2
1
8
3
4
5
5

Total 109 immersion errors

Combined Immersion Scores (304 + 109) = 413; Combined P-by-P Scores (554 + 109) = 689

Table 6
Second-Grade Preferred Immersion Scores
 (44% of second-graders)

“Let Us Chase” Immersion		“Who’s That Tapping” P-by-P	
G#1	2		4
B#6	2		10
G#8	0		0
B#9	0		0
G#11	2		83
G#12	0		4
B#16	70		63
B#17	1		11
G#18	0		81
<hr/>		<hr/>	
(total 77)		(total 256)	
“Who’s That Tapping” Immersion		“Let Us Chase” P-by-P	
B#40	3		0
B#45	0		70
G#46	0		10
B#47	0		4
G#48	0		6
B#51	1		2
B#52	0		8
G#54	2		4
<hr/>		<hr/>	
(total 6)		(total 104)	
Combined Total: 83 immersion errors		Combined Total: 360 p-by-p errors	
G = Girl			
B = Boy			

Table 7
Second-Grade Preferred Phrase-by-Phrase
 (56% of the second-graders)

“Who’s That Tapping” P-by-P

B#2	4
G#3	4
G#4	4
B#5	37
G#7	18
G#10	0
G#13	2
B#14	44
B#15	1
G#19	0
B#20	2
G#21	0

(total 116)

“Let Us Chase” Phrase-by-Phrase

G#41	0
B#42	47
G#43	4
G#44	25
B#49	0
G#50	0
G#53	12
G#55	0
B#56	3
B#57	0

(total 91)

Combined Total: 207 p-by-p errors

B = Boy

G = Girl

“Let Us Chase” Immersion

0
16
4
0
4
4
70
52
25
2
12
0

(total 189)

“Who’s That Tapping” Immersion

0
4
0
6
4
0
3
4
4
0

(total 25)

Combined Total: 214 immersion errors

A second test was done to see if the second-graders that preferred phrase-by-phrase had lower phrase-by-phrase scores (Table 8).

Table 8

Second-Grade Preferred Phrase-by-Phrase versus Non-Preferred Immersion Scores

P-by-P scores (preferred)	Immersion scores (non-preferred)	X ²	p	C.V.	Results
207	214	0.116	> .05	3.8	Fail to reject Ho

Results show there was not a significant difference between the preferred and non-preferred scores. The second-graders that preferred the phrase-by-phrase method did not make significantly fewer errors when they sang the song learned through their preferred method, phrase-by-phrase. The subjects made almost the same amount of errors whether they preferred the method or not.

Chi Square tests were done to see if any difference between the preferred score and the non-preferred scores might appear (Table 9).

Table 9

Fifth-Grade Preferred Immersion Scores versus Non-Preferred Phrase-by-Phrase Scores

Immersion scores (Preferred)	P-by-p scores (non-preferred)	X ²	p	C.V.	Results
192	341	41.65	< .001	3.84	Reject Ho

Results showed there was a significant difference between the preferred and non-preferred scores. The preferred scores, immersion, were significantly lower than the non-preferred scores phrase-by-phrase, meaning the subject's preferred method yielded significantly fewer errors. Tables 10 and 11 show the fifth-grade scores separated by preference scores.

Table 10
Fifth-Grade Preferred Immersion Scores
 (38% of fifth-graders)

“Ida Red” Immersion

B#23	2
G#24	0
B#25	5
B#28	30
G#29	60
G#31	3
G#33	30
B#36	2
B#37	17

(Total 149)

“Grandma Grunts” Immersion

B#60	2
B#65	34
G#67	0
B#68	5
B#69	2

(Total 43)

Combined Total: 192 immersion errors

“Grandma Grunts” P-by-P

76
26
7
59
1
7
32
59
31

(Total 298)

“Ida Red” Phrase-by-Phrase

7
33
0
2
1

(Total 43)

Combined Total: 341 phrase-by-phrase errors

B = Boy

G = Girl

Table 11
Fifth-Grade Preferred Phrase-by-Phrase Scores
 (62% of fifth-graders)

“Grandma Grunts” P-by-P		“Ida Red” Immersion
G#22	38	7
B#26	2	54
B#27	75	0
G#30	1	2
G#32	36	62
G#34	43	1
G#35	2	2
B#38	43	27
B#39	16	0
<hr/>		<hr/>
(Total 256)		(Total 256)
“Ida Red” Phrase-by-Phrase		“Grandma Grunts” Immersion
G#58	3	2
B#59	23	0
G#61	5	2
G#62	0	0
B#63	0	0
G#64	0	32
G#66	0	2
B#70	0	2
B#71	2	1
G#72	6	8
B#73	14	3
G#74	30	4
G#75	0	5
G#76	9	5
<hr/>		<hr/>
(Total 92)		(Total 66)
Combined Total: 348 phrase-by-phrase errors		Combined Total: 221 immersion errors

B = Boy
 G = Girl

Table 12 includes data from the chi square test from the fifth-grade preferred phrase-by-phrase scores and non-preferred immersion scores.

Table 12

Fifth-Grade Preferred Phrase-by-Phrase Scores versus Non-Preferred Immersion Scores

phrase-by-phrase scores (preferred)	immersion scores (non-preferred)	X ²	p	C.V.	Results
348	221	28.35	< .001	3.84	Reject Ho

Again, results show there was a significant difference between the preferred and non-preferred scores. This time the preferred phrase-by-phrase scores were not lower than the non-preferred immersion scores, meaning the subject's preferred method did not yield fewer errors.

Table 13 displays second-grade immersion and phrase-by-phrase scores for the first three questions in the student packet. The scores are divided to show how they relate to the overall method preferred. Of the second-graders that chose immersion for their answer to questions #1 (Which way helped you learn the song the best?) and #3 (Which way helped you learn the tune the best?), the students made fewer immersion errors, except for question #2 (Which way helped you learn the words the best?) where the students made fewer errors under phrase-by-phrase conditions. Of the second-graders that chose phrase-by-phrase for all three questions, there were significantly fewer immersion errors. The percentage of students who answered the question with either immersion or phrase-by-phrase is given as well (Table 14).

Table 13

Second-Grade Choice Scores for Questions 1, 2, and 3 in the Packet

Question	Answered Immersion		Answered Phrase-by-Phrase	
	Immersion scores:	Phrase-by-Phrase scores:	Immersion scores:	Phrase-by-Phrase scores:
#1 “Which way helped you learn the song the best?”	125	319	172	248
#2 “Which way helped you learn the words the best?”	169	157	128	410
#3 “Which way helped you learn the tune the best?”	184	404	113	163

Table 14

Number of Second-Graders Who Answered Either Immersion or Phrase-by-Phrase for Questions 1, 2, and 3

Question #	Answered Immersion	Answered P-by-P
	Question #1	17 students – 44%
Question #2	18 students – 46%	21 students – 54%
Question #3	23 students – 59%	16 students – 41%
Mean	50%	50%

Table 15 displays the same information except the numbers reflect the fifth-grade results. Of the fifth-graders that preferred immersion, the students made fewer immersion errors. Of the fifth-graders that chose phrase-by-phrase for their answer to questions #1 and #3, the students made fewer immersion errors, except for question #2 where the students made fewer errors under phrase-by-phrase conditions. The percentage of students who answered the question with either immersion or phrase-by-phrase is given as well (Table16).

Table 15
Fifth-Grade Choice Scores for Question 1, 2, and 3 in the Packet

Question	Answered Immersion		Answered Phrase-by-Phrase	
#1 “Which way helped you learn the song the best?”	Immersion scores: 155	Phrase-by-Phrase scores: 416	Immersion scores: 258	Phrase-by-Phrase scores: 273
#2 “Which way helped you learn the words the best?”	Immersion scores: 235	Phrase-by-Phrase scores: 535	Immersion scores: 178	Phrase-by-Phrase scores: 154
#3 “Which way helped you learn the tune the best?”	Immersion scores: 205	Phrase-by-Phrase scores: 346	Immersion scores: 208	Phrase-by-Phrase scores: 343

Table 16
Number of Fifth-Graders Who Answered Either Immersion or Phrase-by-Phrase for Questions 1, 2, and 3

Question #	Answered Immersion	Answered Phrase-by-Phrase
Question #1	13 students – 35%	24 students – 65%
Question #2	22 students – 59%	15 students – 41%
Question #3	15 students – 41%	22 students – 59%
Mean	45%	55%

Chi Square tests were calculated to see if a gender difference might be apparent between the preference choices (Table 17). All four classes failed to reject the null hypothesis, which means there was not a significant difference between the number of girls or boys who preferred immersion or phrase-by-phrase.

Table 17
Second and Fifth-Grade Gender Preference

	Girls	Boys	X ²	p	Results
Second graders prefer immersion	8	9	0.058	> .05	Fail to reject Ho
Second graders prefer phrase-by-phrase	13	9	0.73	> .05	Fail to reject Ho
Fifth graders prefer immersion	5	9	1.14	> .05	Fail to reject Ho
Fifth grades prefer phrase-by-phrase	14	9	1.09	> .05	Fail to reject Ho

CHAPTER V

DISCUSSION

From the previous section, it would be safe to say that both second and fifth-grade students made fewer errors when performing the song learned through immersion. This is consistent with findings in previous research (Klinger, Campbell & Goolsby, 1998; Barnes, 1999). Perhaps student learning is heightened when a song is repeatedly presented to them in its entirety. The fact that both second and fifth-grade scores reflect the same comparison might help strengthen this idea. This might be one step closer to finding the most effective rote song learning approach in the classroom.

The regular music teacher in the school all the subjects attended uses the immersion method on a regular basis. This could have contributed to the fact that more students made fewer errors when singing the song learned through immersion. It should be remembered, however, that in the Klinger, Campbell and Goolsby (1998) study, the music teacher regularly used the phrase-by-phrase approach and those students also made fewer errors when using the immersion method as well. This information might lead us to believe that the teacher's choice method in the classroom may not influence student accuracy, but may have more to do with a student's natural tendencies. Further research would be needed in order to find more information regarding the effects of teaching methods. For example, if twenty teachers only use the phrase-by-phrase method in their classroom, and the students were tested, would the students make fewer errors when learning the song phrase-by-phrase instead of through immersion?

Looking at Tables 1 and 3, some students had dramatically more errors than others. Errors for individual students ranged from 0 (no errors) – 83 with only 3 fifth-graders and 6 second-graders scoring 0 both times. Informal observation of the singers revealed that the high number of errors can be attributed to a few common factors: the student forgot all or parts of the song, the student made up a new tune, the student sang the wrong tune, or the student spoke instead of singing. One or a combination of these factors contributed to the high number of errors among individual students. Student musical or academic aptitude also might have been a factor, but was untested in this study.

The second part of this study dealt with student preferences. In order to see if the students made fewer errors when paired with their preferred method, the scores were separated according to preference. In second-grade, 44% of the students preferred immersion and 56% preferred phrase-by-phrase (Tables 5 & 6). Second-graders only slightly preferred phrase-by-phrase over immersion. In fifth-grade, 38% of the students preferred immersion and 62% preferred phrase-by-phrase (Tables 9 & 10). Thus, fifth-graders also preferred the phrase-by-phrase method. Even though many more fifth-graders preferred phrase-by-phrase (62%), all of the fifth-graders made fewer errors when singing the song learned through immersion whether they preferred immersion or phrase-by-phrase. The second-graders who only preferred immersion made significantly fewer errors when singing the song learned through their preferred method, immersion (Table 7). Looking at Table 8, the numbers show a considerably different outcome for the second-graders who preferred phrase-by-phrase. Though they made fewer errors when

using their preferred method, phrase-by-phrase, they did not make significantly fewer errors. There is a stronger relationship between student preference and student learning when the students preferred immersion.

Scores from question #1, “Which way helped you learn the song the best?” question #2, “Which way helped you learn the words the best?” and question #3, “Which way helped you learn the tune the best?” in the student packet were then compared. Table 13 shows the second-grade student scores. When answering the first three questions the percentage of second-graders who answered immersion or phrase-by-phrase was split equally 50/50. Looking at Table 13 and the percentages for question #1 only, 44% of the students answered immersion and 56% of the students answered phrase-by-phrase to question #1. Interestingly enough these are the same percentages of students who preferred immersion (44%) and preferred phrase-by-phrase (56%) seen earlier in the discussion section.

Table 14 shows the fifth-grade student scores for question #1, #2 and #3. Looking at Table 14 and the percentages for question #1 only, 35% of the fifth-graders answered immersion and 65% answered phrase-by-phrase to question #1. These percentages are similar to the percentage of students who preferred immersion (38%) and the percentage of students who preferred phrase-by-phrase (62%) seen earlier in the discussion section.

In order to see if there was a difference between second and fifth-grade gender preferences, the number of girls and the number of boys who preferred either immersion or phrase-by-phrase was analyzed. Tests revealed there was no significant difference in

preference choice between genders in either grade. In both grades, Table 15 shows an equal number of boys who preferred immersion and phrase-by-phrase. Looking at the girls' scores, more girls, no matter the grade, preferred phrase-by-phrase over immersion.

Due to the relatively small number of subjects from a single geographic area, comparisons of only two grade levels, and the use of only four different songs, results should be generalized to other populations with caution.

Further study is needed to see if findings remain consistent. This study differed from the Klinger, Campbell and Goolsby (1998) study by bringing in the additional grade and preference factor. Their study examined the effectiveness of the two instructional methods in second-grade, revealing that the students performed with significantly fewer errors when taught through the immersion method. The current study found similar results along with additional findings. Fifth-grade was also tested to see if similar results would appear. Results indicated that both primary and intermediate students seem to have more success when learning a song through immersion.

The common practice of using phrase-by-phrase to teach a rote song (Grant, 1960) might be questioned given the growing body of research indicating the effectiveness of immersion. Perhaps the phrase-by-phrase method should not be taught alone, but in conjunction with the immersion method if the students need further help. Studying this idea more might be one of the next steps to examine. Future research might also be needed to explore the question of retention of song material when using immersion or phrase-by-phrase (Grant, 1960).

The replication of this study should involve teachers as the subjects. Would similar results appear? Would teachers make fewer errors when using immersion, but prefer phrase-by-phrase? If so, how would what the teachers prefer relate to their choice method in the classroom? Official research is not needed in order for teachers to experiment in their own classrooms. Teachers should be flexible and open to these new ideas. Maybe this would help encourage teachers to become more involved in research. The longevity of current findings is important for future research. If this study were to be conducted forty years from now, how would results compare? Or will new methods of teaching songs have evolved?

The purpose of this study was to help provide more research for teachers when making decisions in the elementary classroom. Specifically, this study was designed to assist teachers in making the decision to either use immersion or phrase-by-phrase method when teaching a new song. This study revealed most students prefer phrase-by-phrase, but are most successful when they learn a song through immersion. Musical accuracy and student preference was only related when the student preferred immersion and second-graders preferred phrase-by-phrase. This information can only help teachers in their quest to find the most effective method of teaching songs to their students.

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APPENDIX A
THE STUDENT PACKET

Fifth-Grade or Second-Grade
Homeroom Teacher's Name
Date

“Let Us Chase the Squirrel” (second-grade)
“Ida Red” (fifth-grade)

“Who’s That Tapping at My Window” (second-grade)
“Grandma Grunts” (fifth-grade)

Which way helped you learn the song the best?

1st Way

or the

2nd Way

Which way helped you learn the words the best?

1st Way

or the

2nd Way

Which way helped you learn the tune the best?

1st Way

or the

2nd Way

If you had your choice, which way would you like to learn a new song?

1st Way

or the

2nd Way

APPENDIX B
HUMAN SUBJECTS COMMITTEE
APPROVAL LETTER

**Texas Tech University
Institutional Review Board for the Protection of Human Subjects
Office of Research Services
203 Holden Hall/MS 1035
742-3884**

August 1, 2005

Dr. Janice Killian
Music - V&PA
Mail Stop: 2033

Regarding: 500065 The Effects of Immersion and Phrase-by-Phrase Learning on Elementary Students' Song Acquisition

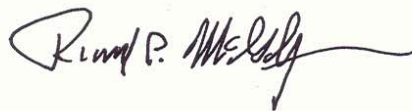
Dr. Janice Killian:

The Texas Tech University Protection of Human Subjects Committee approved your claim for an exemption for the proposal referenced above on July 23, 2005.

Exempt research is not subject to continuing review, but any modifications that (a) change the research in a substantial way, (b) might change the basis for exemption, or (c) might introduce any additional risk to subjects should be reported to the IRB, before they are implemented, in the form of a new claim for exemption or a proposal for expedited or full board review.

Extension of exempt status for exempt projects that have not changed is automatic. You should inform the Secretary of the Committee when the exempt research is completed (at least via response to yearly reminders) so that the file can be archived.

Best of luck on your project.



Richard P. McGlynn, Chair
Protection of Human Subjects Committee

APPENDIX C
MUSICAL NOTATION

Let Us Chase The Squirrel

CSP: D

North Carolina - Game Song

♩ = 140

12

Let us chase the squir - rel. Up the hick - 'ry, down the hick - 'ry

Let us chase the squir - rel, Up the hick - 'ry tree.

Detailed description: This block contains the musical notation for the song 'Let Us Chase The Squirrel'. It is in 2/4 time with a tempo of 140. The first line of music starts at measure 12 and includes the lyrics 'Let us chase the squir - rel. Up the hick - 'ry, down the hick - 'ry'. The second line of music continues the melody and includes the lyrics 'Let us chase the squir - rel, Up the hick - 'ry tree.'.

Who's That Tapping At The Window?

CSP: D

♩ = 138

15

Who's that tap - ping at the win - dow,

Who's that knock - ing at the door?

Mam - my tap - ping at the win - dow,

Dad - dy knock - ing at the door.

Detailed description: This block contains the musical notation for the song 'Who's That Tapping At The Window?'. It is in 2/4 time with a tempo of 138. The first line of music starts at measure 15 and includes the lyrics 'Who's that tap - ping at the win - dow,'. The second line includes 'Who's that knock - ing at the door?'. The third line includes 'Mam - my tap - ping at the win - dow,'. The fourth line includes 'Dad - dy knock - ing at the door.'.

Ida Red

CSP: D

Kentucky

♩ = 104

38

Down the road and a - cross the creek, Can't get a let - ter but once a week.

I - da Red, I - da Blue, I got stuck on I - da too.

Detailed description: This block contains the musical notation for the song 'Ida Red'. It is in 2/4 time with a tempo of 104. The first line of music starts at measure 38 and includes the lyrics 'Down the road and a - cross the creek, Can't get a let - ter but once a week.'. The second line includes 'I - da Red, I - da Blue, I got stuck on I - da too.'.

Grandma Grunts

CSP: D

7

♩ = 152

Grand - ma Grunts said a cur - i - ous thing,

"Boys may whis - tle but girls must sing!"

That is what I heard her say,

'Twas no long - er than yes - ter - day.

Detailed description: This block contains the musical notation for the song 'Grandma Grunts'. It is in 2/4 time with a tempo of 152. The first line of music includes the lyrics 'Grand - ma Grunts said a cur - i - ous thing,'. The second line includes '"Boys may whis - tle but girls must sing!"'. The third line includes 'That is what I heard her say,'. The fourth line includes ''Twas no long - er than yes - ter - day.'.

APPENDIX D
PERMISSION TO COPY

PERMISSION TO COPY

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Agree (Permission is granted.)

Natalie Sorrells

4/21/06

Student Signature

Date

Disagree (Permission is not granted.)

Student Signature

Date