*International Journal of Humanities and Social Science Invention*
*ISSN (Online): 2319 – 7722, ISSN (Print): 2319 – 7714*
*www.ijhssi.org ||Volume 5 Issue 7 ||July. 2016 || PP.16-25*

# The Effects of Rhythmical Articulation Skills of Primary School Teacher Candidates on Playing Instrument Skills

Ayfer Kocabas
*Dokuz Eylul University, Buca Educational Faculty, Department of Primary Education, Buca, İzmir, Turkey*

***ABSTRACT:*** *The aim of the research was to determine the effects of rhythmical articulation skills of primary school teacher candidates, who will be responsible from carrying out music courses as well as other domains in teaching, on playing instrument in instrument supported music courses. This study was an ex post facto research which has ınvestıgated the effects of rhythmical articulation skills on ınstrument playing skills. In the research design Teacher Candidates were grouped according the rhythmical articulation and instrument playing examination timing. Firstly, the rhythmical articulation skills of teacher candidates were evaluated shortly after instrument playing skills. The correlation coefficient between two measurements was found to be R=0,73 and prediction coefficient R²=0,53 was found as middle level and significant. It meant that %53 of instrument playing skills were explained by rhythmical articulation skills. There were significant differences in rhythmical articulation skills and instrument playing skills in terms of gender in the second group. Female candidates' rhythmical articulation and ınstrument playing skills means were found higher and meaningful than the male candidates'. But according to instrument types there were no meaningful differences. Based on this research, it can be suggested frequently skills of playing an instrument is supported by rhythmical articulation skills in general music course implementations and evaluations. Similar researches should be done to develop music and teaching music course in the primary school teacher education program. As a conclusion ıt can be said that rhythmical articulation skills has supply important clue for retention of melody before playing an instrument.*

***Keywords:*** *Primary school teacher education, teaching music, teaching instrument, rhythmical articulation*

## I. Introduction

Music education is a process in which musical abilities of individual are revealed and developed, and individual is gained some behaviors related to music through his/her own life, or certain changes in behaviors related to music of individual are formed through his/her own life. Basic dimensions of this process – musical hearing, musical reading and writing, singing, playing an instrument, listening to music, musical creativity, enhancing musical susceptibility, developing music taste – improve, feed and aggrandize the society, individual and the culture (Uçan1999). Rhythm and rhythm education are primary elements in each level and dimension of music education. These elements are indispensable in general music education, amateur music education and vocational music education. Students who are studying in undergraduate programs as primary school teachers are not responsible for passing special musical talent exam depending on the purpose of training teachers and field properties; but, they are responsible for teaching music at primary school level–minimum level and this teaching should be appropriate for the principles and methods of music field. Primary school teachers are born with a certain musical ability as are all mankind. Among the sufficiency of being a primary school teacher, "Art and Aesthetics" is a special field. This sufficient field consists of these implementations: having core knowledge related to music because of fine arts, learning artistic activities and using them in the process of teaching, considering the aspect of aesthetics while organizing the learning environments, adoption of the skills of thinking creative in applications, having ability to interiorize the importance that Ataturk gave to the development of the art. (MEB 2008). Performance indicators at the level of A1, A2, and A3 have been specified. For this aim, as a lesson, "music" takes part as "1 hour theoretical", and "2 hours practical" per week in the first term; as a lesson, "teaching music" takes part as "1 hour theoretical", and "2 hours practical" per week in the second term in Curriculum of Primary School Teacher Education Department. In the curriculum of primary schools, music lessons take part as 1 hour per week in the syllabus of 1st, 2nd, 3rd, and 4th grades. The time allocated to music is too insufficient for the process of forming musical notions and developing musical skills through revealing them requires that primary school teachers become more sufficient for musical equipment in this process (Küçüköncü 2000; Şaktanlı 2004; Arıcı 2011; Kocabaş2003). Not only does Primary School Music Education Curriculum submit learning experiences to primary school teachers to amalgamate new musical knowledge and skill with former ones, and to interpret and to use them in their life through student-centered activities, but provides for doing flexible plans to have students be active in the classroom, as well. Primary School Music Education Curriculum is based on four primary fields which are "Listening-Singing-Playing", "Musical Perception and Enlightment", "Musical Creativity", and "Music Culture''. In

addition to this, it is offered to use appropriate assessment and evaluation approaches by planning the lesson and converting it in implementation according to Multiple Intelligence Tests, The 5E Learning Cycle Model of Interactive (Interpersonal) Learning and Contructivist Learning Approach together with special teaching methods like "Dalcrose, Orff, Kodaly" based on dance, game and motion being appropriate for acquisition in music education (MEB 2012:14-25). Although Dalcrose, Orff, and Kodaly are methods which are based on rhythm and motion, implementing rhythm, which is the key element of music, correctly affects the whole music activities ( O'Brien1983).With the research made by Kocabas (2003:30-45), it was found that using and teaching "Music Learning Strategies" including rhythm activities which are used by Early Childhood Teacher Candidates help to learn in music. It has been revealed that mastery learning fell through the skills of rhytmic articulation, saying the names of musical notes without hesitation, reading music note values correctly and showing beatings with hands without missing in the rhythmic articulation skills of primary school teacher candidates in the research which was made about rhythmic articulation skills of primary school teachers by Kurtaslan and Koca(2013). Primary school teacher candidates generally said "partially" as an answer to the question; "To what extent did you gain bona knowledge?" by Arapkirli and Karagöz (2010). That in the primary school teaching field, musical knowledge and skills can not reach to mastery learning stage continues to be the topic of lots of researches.

That Rhythm Skills which are the most essential element of music as a part of which provides a basis for attitude, knowledge and skills in the following steps of education and training for a student are transformed into practice correctly is gaining importance with regards to the realization of acquisition in music courses. Melodic playing, singing, listening skills and musical creations which are established in the basis of correct rhythm knowledge and rhythm skills will create a cause and effect relation in self-actualization and self-expression of an individual and in composing a positive sense of self. That's why, correct rhythm reading and rhythmic speaking skills as the most essential skills of primary school teacher candidates will provide an effective learning, which can be described as learning how to learn in music, and discovering musical codes. A primary school teacher equipped with these skills will not be able to only decode the melodies at his/her level easily with his/her voice and instrument but he/she will be able to make a contribution to his/her vocational improvement, his/her students with more effective and prosperous activities and to the culture of society also.

Because of being developed by Pasquale Bona (http://www.musikidergisi.net), who was an Italian composer, vocal artist and Musical theorist, Rhythmic Reading is called as Bona method, too. In brief, it's a method in which musical notes are read according to their rhythmical value. The book which was published with the name of "Bona, MetodaPer Division" provides convenience to teaching musical notes and teaching note-values in the beginning. Solfeggio is vocalizing the musical notes according to the rhythm and loudness; however, Bona means reading the notes only with their rhythmic values like speaking (http://www.musikidergisi.net/?p=1210). A primary school teacher implementing rhythmic reading correctly will be able to use his/her instrument and voice properly and will be able to have aesthetics components about them.

**1.1. The Reason for Research**

DokuzEylül University, Faculty of Education, Division of Primary School Teaching, Music Courses have been maintained mainly with rhythmic reading-based and instrument playing-supported. Students are examined individually for their performance to evaluate their rhythmic reading and instrument playing skills in the middle of each term, in music courses. Final exams are carried out as a practical performance exam. It was observed that teacher candidates were not able to transfer their rhythmic reading skills into their solfege and instrument playing skills properly, although rhythmic articulation skills were repeated in the beginning of every lesson and after every melody teaching. There was a three-week gap between the rhythmic articulation exam and the instrument playing exam. Because students were being taken to the exam individually causes to time and location problem.

2013-2014 Education Year Fall Semester in Music Course first, rhythmic articulation skills, three weeks later instrument playing skills were analysed thinking whether there was a relation or regression between the scores of students or not, to enhance the course. But, it was found that there was a hardly visible relation between students' rhythmic articulation skills and instrument playing skills. However, students were examined for rhythmic articulation skills first, right after then, for instrument playing skills next year in 2014-2015 Fall Semester and it was found that there was a good relation and regression between those scores when they were analysed. Teacher candidates are responsible for taking music course only Fall Semester and Teaching Music course in the Spring Semester in the second years. Research was an action research at the same time, because of being focused on the process of learning and teaching in a social context to improve the quality of teacher candidates, taking the courses of music and music teaching. Teachers making an action research are not individuals only using the knowledge taught by professors, but also they are individuals producing a new information by finding solutions to the problems they come across in the light of old knowledge and improving

their expertise or vocations in this way according to the quotes of Büyüköztürk and the others (2010:278) from Mills (2003).
Consequently, bringing forward proposals which contribute to enhance the performance of primary school teacher candidates in music courses, music teaching courses, and while teaching music in the future were intended sharing these research results.

### 1.2. Problem Sentences

The problem of this research was constituted in the question "Is there any meaningful relation between Rhythmical Articulation Skills and Instrument Playing Skills levels?" and "Do the Rhythmical Articulation Skills predict to Instrument Playing Skills of primary school teacher candidates?"

### 1.3. Sub-Problem Sentences

Research question has been distributed eight sub-questions given below.

1. Does the level of Rhythmical Articulation Skills of the candidates of primary school teachers in the Group-II vary significantly in terms of gender?
2. Does the level of Instrument Playing Skills of the candidates of primary school teachers in Group-II vary significantly in terms of gender?
3. Is there any meaningful difference between the levels of Rhythmical Articulation Skills and Instrument Playing Skills of the candidates of primary school teachers in Group-II ?
4. Does the level of Instrument Playing Skills of the candidates of primary school teachers in Group-II vary significantly in terms of ınstrument type?
5. Is there any meaningful difference between Group-I and Group-II regarding to Rhythmical Articulation Skills?
6. Is there any meaningful difference between Group-I and Group-II regarding to Instrument Playing Skills levels?
7. Is there any meaningful relation between the levels of Rhythmical Articulation Skills and Instrument Playing Skills of the candidates of primary school teachers in the two groups?
8. Do the Rhythmical Articulation Skills predictto InstrumentPlaying Skills of the candidates of primary school teachers in the two groups?

## II. Materials and Method

This study was an ex post facto (Büyüköztürk2010:238-241) research which has investigated the effects of rhythmical articulation skills on playing instrument. Ex post facto researches are similar with experimental research in term of having criterion group as control group to provide comparison. In the research design teacher candidates were grouped according to the rhythmical articulation and instrument playing examination timing. First group (Group-I) was evaluated firstly from rhythmical articulation skills and three weeks later instrument playing skills, second group (Group-II) was evaluated from rhythmical articulation skills just before instrument playing skills. In this research rhythmical articulation skills has been determined as independent variable and instrument playing skills as dependent variable.

### 2.1. Universe and sample of the research

The universe of the research was 2nd, 3rd, and 4th grades teacher candidates who have been given music and teaching music courses. The Sample of the study has been composed from teacher candidates who were student in 2013-2014 education year Fall Semester in Music Course ( n=470 formal and second programmes) and keeping on their educations in 2014-2015 Fall Semester in DokuzEylül University Faculty of Education Division of Primary School Teacher Education (n=123 only formal programme) as totally 593.

**Table1.** Research design

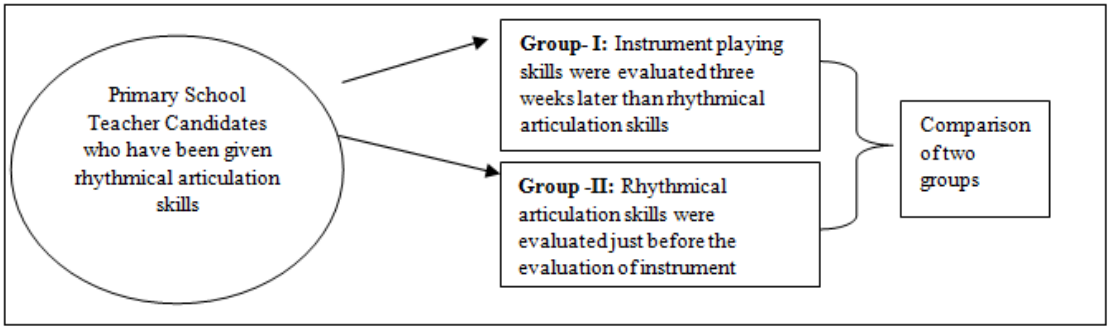

**Figure 1:** Histogram of the Rhythmical Articulation Skills for the Group– I

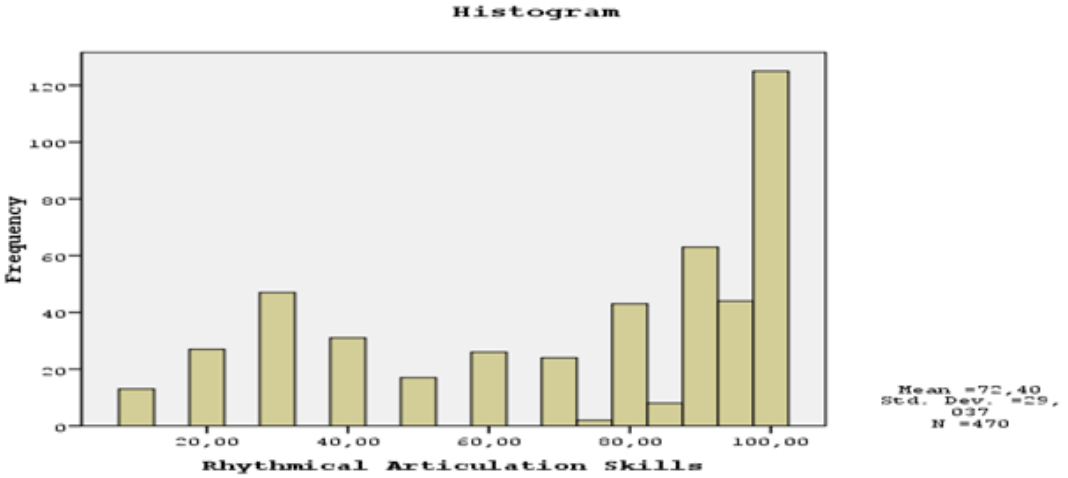


**Figure 2:** Histogram of the Instrument Playing Skills for the Group- I

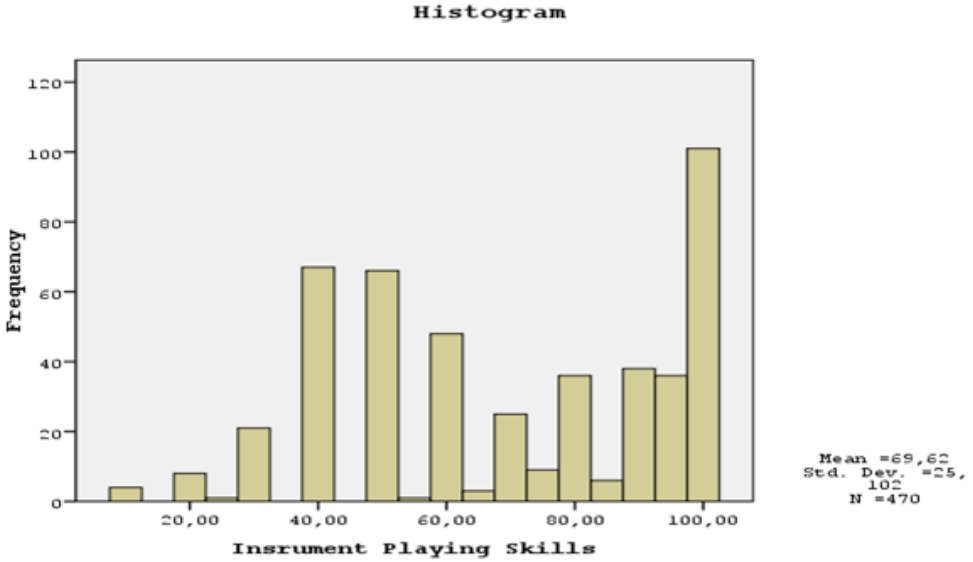


**Figure 3:** Histogram of the Rhythmical Articulation Skills for the Group- II

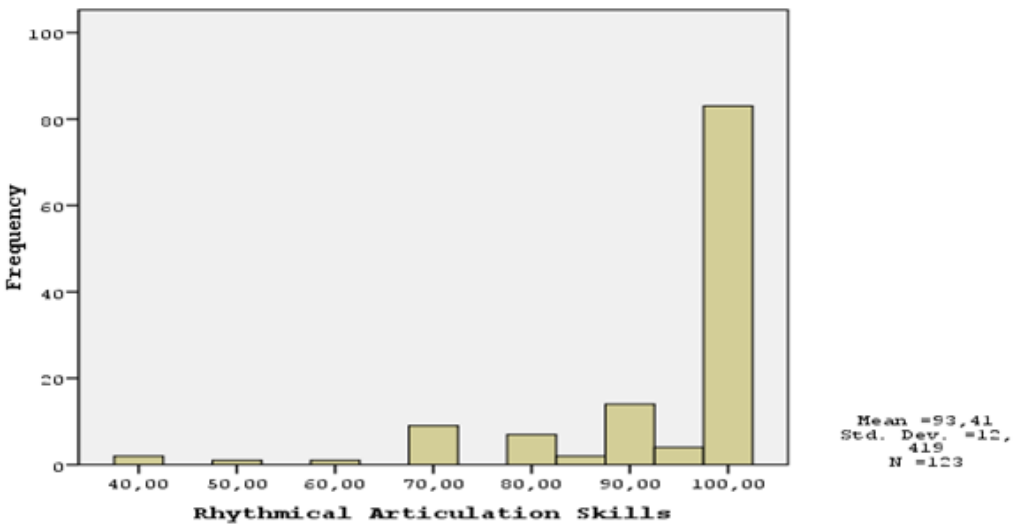

**Figure 4:** Histogram of the Instrument Playing Skills for the Group- II

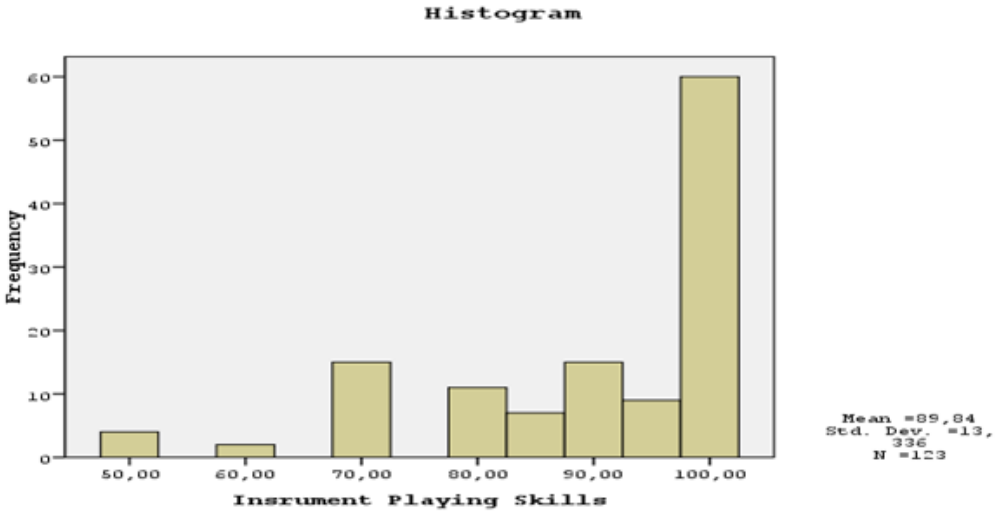


**Table 2.** Distribution of the sample according to gender in the Group- I

| Gender | n | % |
|---|---|---|
| Female | 313 | 66.59 |
| Male | 157 | 33.41 |
| Total | 470 | 100 |

As seen in Table 2, according to the gender variable 313 female and 157 male teacher candidates as total number of teacher candidates are 470 in Group-I. The percentage are % 66.60 for the female and %33.40 for the male teacher candidates. According to distribution, female teacher candidates are more than half of the total number.

**Table 3.** Distribution of the sample according to instrument type in the Group-I

| Instrument type | n | % | $\overline{X}$ |
|---|---|---|---|
| Recorder | 273 | 57.44 | 67.41 |
| Melodica | 99 | 21.06 | 66.46 |
| Glokenspiel | 98 | 20.85 | 78.92 |
| Total | 470 | 100 | |

In Table 3, distribution of the Group-I has been seen according to instrument type. According to this variable 273 teacher candidates played recorder, 99 teacher candidates played melodica and 98 teacher candidate playedglockenspiel. Teacher candidates who played recorder had the highest percentage as 57.40%, secondly for themelodica21% and fourth one is the glockenspiel 21%.

**Table 4.** Distribution of the sample according to gender in the Group-II

| Gender | n | % |
|---|---|---|
| Female | 81 | 65.85 |
| Male | 42 | 34.15 |
| Total | 123 | 100 |

As seen in Table 4 according to gender variable 81 female and 42 male teacher as total number of teacher candidates is 123 in Group-II. The percentage are %66 for female and %34 for the male teacher candidates. According to distribution female teacher candidates are more half of the total number.

**Table 5.** Distribution of the sample according to instrument type in the Group-II

| Instrument type | n | % | $\overline{X}$ |
|---|---|---|---|
| Melodica | 112 | 91.05 | 90.22 |
| Glokenspiel | 11 | 8.95 | 85.91 |
| Total | 123 | 100 | |

In Table 5 distribution of the Group-II has been seen according to instrument type. According to this variable 112 teacher candidates played melodica and 11 student teachers glockenspiel. Teacher candidates who played

melodica had the highest percentage as % 91, secondly for the glockenspiel % 9. It can be said that teacher candidates who played melodica had the most highest percentage.

***2.2.Data collection instrument***

Data were collected with Observation Form of Rhythmical Articulation Skills and Observation Form of Instrument Playing Skills developed by researcher. Observation Form of Rhythmical Articulation Skills were analyzed for six sub-skills and these skills were observed by two observer. Obtained correlation coefficient was found to be 0.86, between two observation. For Observation Form of Instrument Playing Skills, playing skills were analyzed as four sub-skills. Teacher candidates were observed while they were playing by using Observation Form of Instrument Playing Skills, by two observer and correlation coefficient was found to be 0.93.

***2.3.Analyzing data***

Data were analyzed by SPSS 15.00 package program by frequency, percentage, t -test, means, Kolmogorov-Smirnow, for nonparametric comparison Mann Whitney-U test, correlation, regression analysis.

## III. Findings and Interpretations

Findings and interpretations have been gıven in line with the sub-problems of the research.

1. Does the level of Rhythmical Articulation Skills of the candidates of primary school teachers in the Group-II vary significantly in terms of gender?

**Table6.** The Mann Whitney U-test results for unrelated sample in relation to rhythmical articulation skills according to gender in the Group-II

| Group | Variable | n | Mean rank | Sum of ranks | U | p |
|---|---|---|---|---|---|---|
| Female | Rhythmical Articulation Skills | 81 | 67.60 | 5476.00 | 1247.00 | 0.004 |
| Male | | 42 | 51.19 | 2150.00 | | |

Table 6 has shown rhythmical articulation skills' mean rank of female and male teacher candidates of the group to which rhythmical articulation skills were evaluated just before the evaluation of instrument playing skills. Mean rank of female teacher candidates (Mean rank =67.60) is higher than male teacher candidates (Mean rank =51.19). Significant difference was checked with the Mann Whitney U-test analyzing. Having done The Mann Whitney U-test, U value (U=1247.00, P<0.004) was found significant. It can be said that female teacher candidates has higher rhythmical articulation retention as a learning strategy in the music than the males.

2. Does the level of Instrument Playing Skills of the candidates of primary school teachers in Group-II vary significantly in terms of gender?

**Table 7.** The Mann Whitney U-test results for unrelated sample in relation to instrument playing skills according to gender in the Group-II

| Group | Variable | n | Mean rank | Sum of ranks | U | p |
|---|---|---|---|---|---|---|
| Female | Insrument Playing Skills | 81 | 69.46 | 5626.50 | 1096.500 | 0.001 |
| Male | | 42 | 47.61 | 1999.50 | | |

Table 7 has shown instrument playing skills' mean rank of female and male teacher candidates of the group to which rhythmical articulation skills were evaluated just before the evaluation of instrument playing skills. Mean rank of female teacher candidates (Mean rank=69.46) is higher than male teacher candidates (Mean rank =47.41). Significant difference was checked with The Mann Whitney U-test analyzing. Having done the Mann Whitney U-test analyzing U value (U=1096.500, P<0.001) was found significant. It can be said that female teacher candidates has higher instrument playing skills than the males same as rhythmical articulation skills. It can be recognized that higher rhythmical articulation skills caused high instrument playing skills.

3. Is there any meaningful difference between the levels of Rhythmical Articulation Skills and Instrument Playing Skills of the candidates of primary school teachers in Group-II ?

**Table 8.** The Mann Whitney U-test results in relation to rhythmical articulation skills and instrument playing skills in the Group-II

| Group | Variable | n | Mean rank | Sum of ranks | U | p |
|---|---|---|---|---|---|---|
| Rhythmical Articulation Skills | Difference | 123 | 135.08 | 16615.00 | 6140.000 | 0.004 |
| Instrument Playing Skills | | 123 | 111.92 | 13766.00 | | |

Table 8 has shown rhythmical articulation skills and playing instrument skills' Mean rank of teacher candidates of the group to which rhythmical articulation skills were evaluated just before the evaluation of instrument playing skills. Mean rank of rhythmical articulation skills (Mean rank =135,08) is higher than playing instrument skills (Mean rank=111,92 ). Significant difference was checked with the Mann Whitney U-test analyzing. Having done the Mann Whitney U-test analyzing, U value (U=6140,000, p<0.004) was found significant.

4. Does the level of Instrument Playing Skills of the candidates of primary school teachers in Group-II vary significantly in terms of ınstrument type?

**Table 9.** The Mann Whitney U-test results in relation to instrument playing skills according to instrument type in the Group-II

| Group | Variable | n | Mean rank | Sum of ranks | U | p |
|---|---|---|---|---|---|---|
| Melodica | Instrument Playing Skills | 112 | 63,59 | 7122 | 438,000 | 0.092 |
| Glokenspiel | | 11 | 45,82 | 504 | | |

Table 9 has shown mean rank of instrument playing skills in terms of ınstrument type of the group to which rhythmical articulation skills were evaluated just before the evaluation of instrument playing skills. Mean rank of playing melodica skills (Mean rank =63.59) is higher than playing glokenspiel skills (Mean rank =45.82). Significant difference was checked with the Mann Whitney U-test analyzing U value (U=438.000, p<0.05) was not found significant. Instrument playing skills were not vary according to instrument types.

5. Is there any meaningful difference between Group-I and Group-II regarding to Rhythmical Articulation Skills?

**Table 10.** The Mann Whitney U-test results between Group–I and Group –II in relation to rhythmical articulation skills

| Group | Variable | n | Mean rank | Sum of ranks | U | p |
|---|---|---|---|---|---|---|
| Group -I | Rhythmical Articulation Skills | 470 | 267,333 | 125643,50 | 14958,500 | 0.000 |
| Group -II | | 123 | 410,39 | 477,50 | | |

In the Table 10, the comparison of the rhythmical articulation skills scores of the groups with the Mann Whitney U-Test for unrelated sample have been given. According to this analysis, Group-II whose rhythmical articulation skills were evaluated just before the evaluation of instrument playing skills has higher mean rank than the Group-I. Having done the Mann Whitney U-test analyzing ( U=14958,500, P<0.0001 ) it was recognized that there was meaningful difference between mean ranks of the groups related to scores of rhythmical articulation skills. Beating rhythm just before instrument playing was more effective than spaced repetition.

6. Is there any meaningful difference between Group-I and Group-II regarding to Instrument Playing Skills levels?

**Table 11.** The Mann Whitney U-test results between Group–I and Group -II in relation to Instrument Playing Skills

| Group | Variable | n | Mean rank | Sum of ranks | U | p |
|---|---|---|---|---|---|---|
| Group -I | Instrument Playing Skills | 470 | 268,17 | 126038,50 | 153553,500 | 0.000 |
| Group -II | | 123 | 407,17 | 50082,50 | | |

In the Table 11 the comparison of the instrument playing skills scores of the groups with the Mann Whitney U-Test for unrelated sample have been given. According to this analysis, Group-II whose rhythmical articulation skills were evaluated just before the evaluation of instrument playing skills has higher mean rank than the Group-I. Having done the Mann Whitney U-test analyzing ( U=153553.500,P<0.0001).

It was recognized that there was meaningful difference between mean ranks of the groups related to scores of instrument playing skills. Beating rhythm just before instrument playing was more effective than spaced repetition on the instrument playing skills. It can be said that rhythmical articulation skills leaded to playing skills.

7. Is there any meaningful correlation between the levels of rhythmical articulation skills and instrument playing skills of the candidates of primary school teachers in the two groups?

**Table12.** The Correlation coefficients between rhythmical articulation skills and instrument playing skills of the Group-I

| | | Rhythmical Articulation Skills | Instrument Playing Skills |
|---|---|---|---|
| Rhythmical Articulation Skills | Correlation | 1 | 0.083 |
| | p | | 0.073 |
| | N | 470 | 470 |
| Playing Instrument Skills | Correlation | 0.083 | 1 |
| | p | 0.073 | |
| | N | 470 | 470 |

In the Table 12 the correlation scores between rhythmical articulation skills and instrument playing skills of the teacher candidates whose instrument playing skills were evaluated three weeks later than rhythmical articulation skills have been seen. According to this there was 0.083 level correlation between rhythmical articulation skills and instrument playing skills of the teacher candidates. Founded correlation coefficient was rather low and no significant.

**Table 13.** The Correlation coefficients between rhythmical articulation skills and instrument playing skills of the Group-II

| | | Rhythmical Articulation Skills | Instrument Playing Skills |
|---|---|---|---|
| Rhythmical Articulation Skills | Pearson Correlation<br>Sig. (2- Tailed)<br>n | 1<br><br>123 | .731<br>.000<br>123 |
| Instrument Playing Skills | Pearson Correlation<br>Sig. (2- Tailed)<br>n | .731<br>.000<br>123 | 1<br><br>123 |

**Correlation is significant at the 0.01 level

In the Table 13 the correlation scores between rhythmical articulation skills and instrument playing skills of the teacher candidates whose rhythmical articulation skills were evaluated just before the evaluation of instrument playing skills have been given. According to this analysis there was 0.73 level correlation between rhythmical articulation skills and instrument playing skills of the teacher candidates. Founded correlation coefficient was a good level. It can be said that there was good level correlation between rhythmical articulation skills and playing instrument skills. The scores of rhythmical articulation skills and the instrument playing skills increased together.

8. Do the Rhythmical Articulation Skills predict to Instrument Playing Skills of the candidates of primary school teachers in the two groups?

**Table14**. The Regression analysis result between instrument playing skills and rhythmical articulation skills of the Group-I

| Model | R | $R^2$ | Adjusted $R^2$ | Std. error |
|---|---|---|---|---|
| 1 | .083 | .007 | .005 | 25,04274 |

B and Beta Correlation coefficient and significant level

| | Model | B | Std. error | β | t | p |
|---|---|---|---|---|---|---|
| 1 | (constant) | 64,429 | 3,106 | | 20.742 | .000 |
| | Rhythmical Articulation Skills | 0,072 | 0,040 | .83 | 1,789 | .073 |

As it is seen Table 14, instrument playing skills as dependent variable has not been explained with rhythmical articulation skills as undependent variable ($R= 0.083$, $R^2=0.007$, $F (3.237)= P< 0.01$). There was correlation at 0.083 level which was rather low. The prediction level of instrument playing skills has been explained with rhythmical articulation skills at minimum level as 0,007. It can be said that teacher candidates' whose instrument playing skills were evaluated three weeks later than the rhythmical articulation skills, rhythmical retention level was low. To give time between two exam and doing discrete exam have been caused an obstruction for integration of rhythmic and melodic construction.

**Table 15.** The Regression analysis result between instrument playing skills and rhythmical articulation skills of the Group-II

| Model | R | $R^2$ | Adjusted $R^2$ | Std. error |
|---|---|---|---|---|
| 1 | .731 | .534 | .530 | 9.13 |

B and Beta Correlation coefficient and significant level

| | Model | B | Std. error | β | t | p |
|---|---|---|---|---|---|---|
| 1 | (constant) | 16.518 | 6.278 | | 2.631 | .01 |
| | Rhythmical articulation skills | .785 | .067 | .731 | 11.781 | |

*Undependent variable: Rhythmical Articulation Skills*
*Dependent variable: Playing Instrument Skills*

As it is seen Table 15, instrument playing skills as dependent variable has been explained with rhythmical articulation skills as undependent variable ($R= 0.73$, $R^2=0.53$, $F (138.794)= P< 0.01$). There was a correlation at 0.73 level between rhythmical articulation skills and instrument playing skills. The prediction level of instrument playing skills has been explained by rhythmical articulation skills at 0.53 fairly good level. Rhythmical articulation skills scores has explained to 0.53 of the variation of instrument playing skills. Because rhythm is the most basic element of the melody. It can be said that rhythmical articulation skills have increased to retention level just before the instrument playing skills and carried the melody. Do not give time between two exam and doing sequential exam have caused improving playing skills and integration of rhythmic and melodic construction in general music class.

## IV. Conclusion

According to findings and comments;

1. The teacher candidates whose rhythmical articulation skills were evaluated just before the instrument playing skills have higher rhythmical articulation skills than the teacher candidates whose instrument playing skills were evaluated three weeks later than the rhythmical articulation skills.
2. The teacher candidates whose rhythmical articulation skills were evaluated just before the instrument playing skills have higher instrument playing skills than the teacher candidates whose instrument playing skills were evaluated three weeks later than the rhythmical articulation skills.
3. According to study results, the correlation between rhythmical articulation skills and instrument playing skills of teacher candidates whose instrument playing skills were evaluated three weeks later than the rhythmical articulation skills has been found rather low. Due to the low correlation, the prediction level of instrument playing skills has been explained with rhythmical articulation skills at minimum level.
4. A positive and good correlation between rhythmical articulation skills and instrument playing skills of teacher candidates whose rhythmical articulation skills were evaluated just before instrument playing skills has been found. The rhythmical articulation skills and the instrument playing skills were enhanced together. 0.53 of the variation of instrument playing skills were explained with rhythmical articulation skills.

## V. Discussion

Music education is one of the most fundamental education rights like fundamental civil rights. General Music Education is also an indispensable element of the minimum general knowledge that is essential for everyone. Music lesson is obligatory in primary schools and it has been taught by primary school teachers. Rhythmic Articulation involving the duration rates of voice is the key element of the whole musical behaviors. According to the knowledge quoted from Sherbon's works by Tarman(2006), creating awareness about especially duration of voice, pitch, loudness, and timbre which are 4 important elements of voice reveals musical talent potential of students. However Etopio (2009) suggested in her research, early childhood professionals and music education professionals must work in concert to improve the musicianship skill of the early childhood specialist. She found that teachers' tonal composite (their musicianship and use of appropriate tonal strategies) was the strongest predictor of children's tonal skill. Primary school teacher is the one who is responsible for teaching and training the student being aware of this potential in the lesson and the school in a long period (4 years). Thus, that primary school teachers are equipped enough to teach music and music teaching lesson has been gaining importance. The researches made by Kocabas, Selçioğlu (2003); Küçüköncü, (2000); Şaktanlı, (2004); Arıcı, (2011) have revealed that teaching sufficiency in implementations of music lessons by primary school teachers can not be reached exactly. In the research which has revealed the relation between music learning strategies and multiple intelligence fields made by Kocabas (2005), the highest correlation (R=0.48) was found between music learning strategies and Musical-Rhythmic Intelligence field. Logical-Mathematical Intelligence field follows this in second rank (R=0.31). A positive significant relationship was found between music learning strategies and Social-Interpersonal Intelligence Field (R=0.28), Visual-StereoicalIntelligence Field (R=0.26) and Physical Intelligence Field (R=0.19). Considering the fact that each rhythmical articulation skill was a learning strategy (Kocabaş1998), teaching "learning strategies in music" to teacher candidates at first, and having them acquire knowledge, skills, and competencies belonging to department of primary school music education allow these candidates to shape musical skills of students through revealing these skills in early ages. In the research made by Koca and Kurtaslan (2013), it was found that rhythmical articulation skills of primary school teacher candidates cannot reach at the level of mastery learning. In addition to this, casual-comparative

and experimental researches which are based on rhythmical articulation and instrument playing skills in music have not been encountered.

As a consequence of these researches, it was revealed that rhythmical articulation skills of primary school teacher candidates influence instrument playing skills at the rate of 0.53. Memory researches and data processing model can explain this process adequately. Although primary school teacher candidates have taken music lessons during secondary education years systematically, it was observed that rhythmical articulation skills were not emphasized on adequately. Thus, each primary school teacher candidate becomes an undergraduate lacking of knowledge and skills based on rhythmical articulation skills. This process that music educators call as sight rhythm reading is a process in which teacher candidates form a schema acquiring knowledge and shaping musical skills. Within this process, rhythmical articulation skills cannot be transferred into instrument playing skills in the exams accurately. That organization strategies in music cannot be acquired can pose an obstacle for these strategies to get into long-term memory. Thus, it can be said that vocalizing melody just after rhythmical articulation makes acquired knowledge and skills more important for students before the exams, and become more meaningful with adaptation and assimilation. It is possible that repetition of rhythmical articulation skills just before instrument playing activities enables correct vocalization of melody which is a problem situation by being a hint and evokes procedural memory. In this procedural memory, meters can form a procedure schema after rhythmical articulation consecutively and can increase the performance.

## VI. Suggestions

1. Based on this research it can be suggested frequently instrument playing skill supported with rhythmical articulation skills should be taught in general music course implementation sand evaluations.
2. Primary school teacher education programme should include rhythmical articulation course as pre-condition course before taking music and teaching music course. .Music and Teaching Music course based on rhythmical articulation skills should be implemented.
3. Before the performance examinations, rhythmical articulation skills should be repeated for retention as rehearsal.
4. Similar and experimental researches should be made in order to develop music and teaching music course in the primary school teacher education programme.

## References


[1]. Arapgirlioğlu H, Karagöz B 2010. SınıfÖğretmenliğindeMüzikEğitimiSürecinin Durumuve Değerlendirilmesi. *9. SınıfÖğretmenliği EğitimiSempozyumu. Elazığ, BildirilerKitabı,*385-390.

[2]. Arıcı İ 2005. Eğitim Fakültelerinin SınıfÖğretmenliği Anabilim Dallarında Okutulan Müzik Derslerine Yönelik Sorunlar. *MüzikSempozyumu. Kayseri, BildirilerKitabı*, 178-181.

[3]. Bispham J 2006. Rhythm in music: what is it? who has it? And why?*Music Perception Journal*, 24 (2), 125-134.

[4]. "Bona nedir?" 2016. From http://www.musikidergisi.net/?p=1210 (Retrieved April 8, 2015)

[5]. Büyüköztürk Ş 2005. *Sosyal Bilimler İçin Veri Analizi El Kitabı, İstatistik, Araştırma Deseni, Spss Uygulamaları ve Yorum.* Ankara: Pegem A Yayıncılık.

[6]. Dündar M 2003. Anaokulu ve ilköğretimin birinci sınıfında ritm eğitimi. Gazi Üniversitesi, *Gazi Eğitim Fakültesi Dergisi,* Cilt 23, sayı:2, ss.171-180

[7]. EtopioElisabeth A 2009.*Characteristics of earlymusicalenvironmentsassociatedwithpreschoolchildren'smusicskills*.Ph.D. Thesis (Unpublished), New York: University at Buffalo.

[8]. Evolution and musical rhythm 2015. From <http://www.johnbispham.com/pdf2.pdf>(Retrieved April 8, 2015)

[9]. Koca Ş,Kurtaslan H 2013. Sınıf öğretmeni adaylarının bona yapma becerilerinin değerlendirilmesi.*Journal of Research in EducationandTeaching*, 2(3).

[10]. Kocabaş A 1998. Temel eğitim ikinci kademe öğrencileri için geliştirilen müziği öğrenme stratejileri ölçeği.*Milli Eğitim Dergisi*,138: 29-32.

[11]. Kocabaş A 2003. Erken çocukluk dönemi öğretmen adaylarının kullandıkları müziği öğrenme stratejileri ve çoklu zeka alanlarının karşılaştırılması.*OMEP Dünya Konsey Toplantısı ve Konferansı Bildiri Kitabı,* (3)1: 30-45.

[12]. Kocabaş A, Selçioğlu E.2003. İlköğretim 4. ve 5. sınıf müzik dersinin gerçekleşme düzeyine ilişkin öğrenci görüşleri. *Kazım Karabekir Eğitim Fakültesi Dergisi, Güzel Sanatlar Eğitimi Özel Sayısı*. 139-155.

[13]. Kocabaş A 2005. Müzik öğretimi dersi alan öğrencilerin kullandıkları müziği öğrenme stratejileri ve çoklu zeka alanlarına etkisi.*Pamukkale Üniversitesi Eğitim Fakültesi Dergisi,* (2)3.

[14]. Kocabaş A 2013. *Müzik Öğretiminin Temelleri.*İzmir: Kanyılmaz Matbaası.

[15]. Küçüköncü Y 2000. Sınıföğretmenliğindemüzikeğitimi. *Pamukkale Üniversitesi EğitimFakültesi Dergisi*, 7, 8-12.

[16]. Küpana MN 2013. Müzikal yaratıcılığı geliştiren yöntem ve yaklaşımlar.*Journal of Research in EducationandTeaching*, 2, 2.

[17]. Lament M 1976. *Music inElementaryEducation.* New-York: McmillanPublishing

[18]. MEB 2008. *SınıfÖğretmeniÖzel Alan Yeterlikleri.*

[19]. MEB 2012. *İlköğretimmüzik 4-5 öğretmenkılavuzkitabı.*14-2.

[20]. O'Brien J1983. *Teaching Music.*Arizona: Rinehartand Winston. Inc.

[21]. Şaktanlı SC 2004. Eğitimfakültelerisınıföğretmenliğianabilimdalı son sınıföğrencilerininlisansprogramlarındaverilenmüzikeğitimiderslerineilişkingörüşleri.*1924-2004 MusikiMuallimMektebindenGünümüzeÖğretmenYetiştirmeSempozyumuBildirilerKitabı,*271-283.

[22]. Tarman S 2006. *Müzik Eğitiminin Temelleri.* Ankara: Müzik eğitimi yayınları.

[23]. Uçan A 1999. İlköğretimde Müzik Öğretim Yöntemleri,*İlköğretimde Etkili Öğretme ve öğrenme Öğretmen El Kitabı.* Burdur: MEB Projeler Koordinasyon Merkezi Başkanlığı.