Self-evaluation of competence for teaching Music by the students of Class Teacher Studies

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Abstract:

This paper describes the study conducted in the Republic of Croatia during the 2012/13 academic year. The participants of the study were fourth year students of the class teacher studies (N = 307), who evaluated their own competence for teaching music. The goal was to determine if the music course syllabi at the class teacher studies develop the appropriate competences required by the students to teach music in primary education. The research study showed that the students are mostly unaware of how low their competences are, and consequently they assigned high marks to their competence for teaching music courses in primary education, for the general teaching performance and for each specific topic. The students have emphasized the need for more practical training, primarily regarding playing instruments and singing, and they pointed out the course Teaching Methods for Teaching Music as the key course for training future teachers to teach music. The musical competences of primary education teachers cannot be determined in any other way than from the perspective of the lesson plan and programme of the primary school music courses. At the class teacher studies learning music must follow the path from practice to theory.

<u>Keywords</u>: class teacher studies, student competences to teach music, primary education

1. Introduction

Research conducted in the USA (Groff, 1962), Australia (DeVries, 2011; Hocking; 2009; Kane, 2005), Canada (Hanley, 1993), Serbia (Stošić, 2008), England (Altun, 2005), and Turkey (Altun, 2005) demonstrated that teacher education students do not feel competent enough to teach music in primary education. In the USA, Groff (1962 according to Buckner, 2008) examined the opinions of students studying to become primary education teachers regarding their competence for teaching music. It is surprising that as much as 38 percent of the students, after they attended and passed their music courses, stated that they will not be successful in teaching music courses. DeVries (2011) determined that the amount of time dedicated to music courses during class teacher studies affects whether the primary education teacher will teach music or allow a specialist teacher to do so. Hocking (2009) pointed out that students studying to become primary education teachers demand more practical activities as part of their

music courses. A similar opinion is also held by Kane (2005), who stated that music course syllabi must be based on practical musical knowledge and skills that must be adopted through teaching methods for teaching music, which will later be adopted by the students in their own classes. Hanley (1993) stated that music skills should first be developed in students, later the students should be trained to connect the musical theory with practice, and they should also be trained to teach on their own. Stošić (2008) determined that there is an imbalance between the primary school music course syllabus and the actual practical results achieved by the teachers in their classes. Based on his research, Altun (2005) suggested that teacher education faculties should put in more effort when it comes to educating students on music, because most of them never learn how to teach music.

In the Republic of Croatia music courses in primary education are taught by primary education teachers who are also teaching other mandatory courses. A specialist music teacher may take over music courses in the fourth grade. In primary education, the topics of music courses include *singing*, *playing instruments*, *listening to music*, and *musical games* (*Course Plan and Programme for Primary School*, 2006). That is why a primary education teacher should know and be able to implement the stated topics, and they should also be able to accompany their own and singing, as well as the children's, with a music instrument (piano, guitar ...). The students should acquire the stated competence during their class teacher studies (*Study Programme for Primary Education Teachers*, 2005; *Integrated Undergraduate and Graduate Five-Year University Study Programme for Schoolteachers*, 2005).

2. Methodology

As part of this paper, a research study was conducted in the Republic of Croatia during the 2012/13 academic year. The goal of the study was to determine how the teacher education students are evaluating their own competence regarding teaching music. The research study included 307 students from the fourth year of the class teacher studies of the *Faculty of Teacher Education in Osijek* (N=71) and its attached *Studies Located in Slavonski Brod* (N=25), as well as the students from the *Faculty of Teacher Education, University of Zagreb* (N=130) and its *Departments in Čakovec* (N=58) and *Petrinja* (N=23). The survey questionnaire contained 12 *open-end, closed-end, and combined* questions. Most of the survey participants were female and their age was between twenty and twenty-four. In order to check if there are any differences between the students we conducted a one-way analysis of variance, the post hoc analysis (*Scheffe test*), χ^2 test, nonparametric *Kruskal-Wallis test* and a series of *Mann-Whitney tests*.

3. Results

In the first question of the questionnaire we wanted to explore how prepared do the fourth year students from the five class teacher studies in the Republic of Croatia (Osijek, Slavonski Brod, Petrinja, Čakovec, and Zagreb) (N = 307) feel regarding

teaching music. The study participants evaluated their preparedness on the scale from one (lowest) to five (highest mark).

Preparedness of students for teaching			
music courses			
Mark	f	%	
1	1	0.3	
2	2	0.7	
3	26	8.5	
4	161	52.4	
5	117	38.1	
Total	307	100.0	
Average mark 4.27			

Table 1. Self-evaluation of fourth year students regarding their preparedness to teach music courses

Most of the students feel very well and excellently prepared for teaching music courses. As many as 161 study participants (52.4%) believe that they are very well prepared for teaching music, and 117 study participants (38.1%) believe that they are excellently prepared. Only 29 students (9.5%) evaluated their preparedness with a mark lower than four. The average value of student self-evaluation is 4.27.

We will comment on these results a little bit later, once we see how the students evaluated their preparedness for specific course topics and their preparedness to play a backing instrument.

In the second question the students were asked to evaluate in the same manner how prepared they feel for *playing a backing instrument (piano/synthesiser/guitar/accordion), playing percussion instruments, singing, musical games,* and *listening to music.* The results are shown in tables 2, 3, 4, 5, and 6.

Prepared	ness for	playing a backing
instrume	nt	
Mark	f	%
1	5	1.6
2	9	2.9
3	59	19.2
4	132	43.0
5	102	33.2
Total	307	100.0
Average mark 4.03		

Table 2. Self-evaluation regarding preparedness for playing instruments

Self-evaluation of their own preparedness to play a backing instrument is also, as shown, very high, very good on average (4.03), 234 students (76.2%) believe that their preparedness level is very good and excellent. Only three percent of the students believe that they are very poorly prepared for playing instruments, and less than two percent of the students believe that they are insufficiently prepared to play a backing instrument.

Prepareo	dness for	playing percussion		
instrume	instruments			
Mark	f	%		
1	3	1.0		
2	11	3.6		
3	52	16.9		
4	109	35.5		
5	132	43.0		
Total	307	100.0		
Average	e mark 4.1	.6		

Table 3. Self-evaluation regarding preparedness for playing percussion instruments

Table 4. Self-evaluation regarding preparedness for singing

Preparedness for singing		
Mark	f	%
1	6	2.0
2	16	5.2
3	59	19.2
4	91	29.6
5	135	44.0
Total	307	100.0
Average mark 4.08		

Table 5. Self-evaluation regarding preparedness for musical games

Preparedness for musical games			
Mark	f	%	
1	2	0.7	
2	7	2.3	
3	34	11.1	
4	104	33.9	
5	160	52.1	
Total	307	100.0	
Average mark 4.35			

Table 6. Self-evaluation regarding preparedness for listening to music

Preparedness for listening to music		
Mark	f	%
1	1	0.3
2	2	0.7
3	18	5.9
4	102	33.2
5	184	59.9
Total	307	100.0
Average mark 4.55		

The results show that the students feel very well, even excellently prepared for all of the course topics and for playing instruments. The mark excellent (5) was in the top

place for almost all course topics, i.e. it is what most of the students used to evaluate their preparedness. The mark (4) was in the top place only for preparedness for playing a backing instrument.

These results in no way reflect the actual situation, i.e. the students are not nearly as well prepared to teach music - in general and for specific course topics - as they believe they are. Namely, research into music courses in the Republic of Croatia conducted by primary education teachers has shown that music classes during the first three grades of primary school are not of the same quality as the classes taught by specialist music teachers in higher grades of primary school, and that primary education teachers are not competent enough to teach music courses (Šulentić Begić, 2013; Đeldić & Rojko, 2012; Birtić, 2012; Radičević, 2010). That is why it is relevant to ask where the students' "optimism" comes from, i.e. the lack of any (self) criticism. It appears that several factors are involved in creating this result. First, the students are surely under the influence of the general stereotype that music education is more or less an insignificant course that anyone can teach to small children. The practical result of this stereotype is that many teachers would do something else instead of teaching music during music courses. Second, the students receive unrealistically high marks for exams in music courses, including the course Teaching Methods for Teaching Music. Why does that occur? The reason is that those marks are not the real reflection of actual musical knowledge and achievements according to musical criteria, i.e. the criteria of the musical profession, those marks are instead tailored for a specific group. Relatively good marks for modest displays of singing, playing instruments, or planning a class by using the appropriate teaching methods will logically lead to the conviction that this type of singing, playing instruments, or teaching classes - is good. Third, teacher education students are not receiving and cannot receive a wider and more in-depth picture of music as a form of art, so they simply are not able to apply the appropriate criteria to decide what is or is not good, what is a good music class and what is not.

If the preparedness self-evaluations are compared for individual course topics and for their ability to play backing instruments, using the criteria of excellent marks, the rankings are as follows:

- 1. Listening to music (184)
- 2. Musical games (160)
- 3. Singing (135)
- 4. Playing instruments (percussion instruments) (132)
- 5. Playing a backing instrument (102)

Playing a backing instrument is in the fifth place because most of the students (132) evaluated their preparedness for that activity with the mark very good (4).

If the course topics and playing instruments are ranked according to the average mark, then the rankings are as follows:

- 1. Listening to music (4.55)
- 2. Musical games (4.35)
- 3. Playing instruments (percussion instruments) (4.16)

- 4. Singing (4.08)
- 5. Playing a backing instrument (4.03)

Except for the fact that the topics *singing* and *playing instruments* switched places, which is irrelevant, the rankings stayed the same.

In the rankings that include course topics and playing backing instruments according to preparedness, the students have, despite the mentioned lack of self-criticism, displayed a degree of objectivity. It is logical that they believe that they are best prepared for listening to music because that topic does not require any musical skills, it requires knowledge about music and teaching methods, and those are relatively easy to acquire. Also, it is logical that they believe they are not as well prepared for playing instruments because they are acquiring the skill of playing instruments during a very short period of time and in group classes.

The third question was designed to investigate how much time the students will spend as future teachers playing the *piano/synthesiser/guitar/accordion* in class. The study participants were asked to decide on one of the following offered statements:

- a) I will not play instruments in class at all
- b) I will sometimes play only simple songs and those songs that are more familiar to me
- c) I will play as much as I can

Table 7. How much time will students spend playing the piano/synthesiser/guitar/accordion in class

How much	time	will students
spend playing	g instru	uments in class
Statement	f	%
a)	6	2.0
b)	90	29.3
c)	211	68.7
Total	307	100.0

For this question, most of the study participants, 68.7%, chose the most positive statement, the one that does not require any commitments. I will play instruments *as much as I can*, but also, I will not play instruments *if I cannot*. So, the answer to that question does not allow us to conclude that the students will spend a lot of time playing instruments, it only shows that the study participants were not critical in their answers, i.e. they chose the easier option. A critical answer to this question was actually provided only by those six participants who said that *they will not play at all*, because they are hopefully aware that they are not sufficiently prepared for playing instruments (Table 7).

In the fourth and fifth question we wanted to find out how much time will the students, as future teachers, spend teaching *musical games* and *listening to music* in class. The study participants evaluated their intentions on a scale of one (will not be teaching) to five (will teach often). The answers are shown in tables 8 and 9.

How much time will the students spend			
teaching m	usical games		
Mark	f	%	
1	0	0	
2	1	.3	
3	19	6.2	
4	87	28.3	
5	200	65.1	
Total	307	100.0	
Average mark 4.57			

Table 8. How much time will fourth year students spend teaching musical games in class

Table 9. How many of the fourth year students will teach active listening to music

How much time will the students spend				
teaching a	teaching active listening to music			
Mark	f	%		
1	0	0		
2	0	0		
3	13	4.2		
4	87	28.3		
5	207	67.4		
Total	307	100.0		
Average mark 4.63				

The students answered both questions in a very positive and almost identical way: 93.4% of them will teach musical games often and very often, and about the same number of them (95.7%) will listen to music with their students often or very often. These answers should not be interpreted as a reflection of some special preference by the students toward those course topics, but as a reflection of the awareness that they are well trained for those topics.

In the sixth question the students were asked to name the course topic that will be the most important for their music courses.

Table 10. Which course topic will be the most important for music courses

The most important course topic			
Answer	f	%	
Singing	206	67.1	
Listening to music	50	16.3	
Musical games	31	10.1	
Playing	20	6.5	
Total	307	100.0	

For the greatest number of students, i.e. for 206 (67.1%) of them, *singing* will be most important. For a considerably lower number of students, i.e. only 50 (16.3%), *listening to music* will be most important. *Musical games* will be most important for 31 students (10.1%), and *playing instruments* will be most important for only 20 students (6.5%) (Table 10).

When considering the answers to the second question (self-evaluation of preparedness for specific course topics), where competence for singing is in the third, or even fourth place – behind *listening to music* and *teaching musical games* – this answer is somewhat surprising. It was expected that the students will put the topic they are best prepared for as the most important. Nevertheless, they chose another criteria, i.e. they decided on the topic that they logically know to be the most important activity in primary education, regardless of the fact that they consider themselves to be less prepared for it then for *listening to music, teaching musical games*, or even *playing instruments* (as a course topic). As researchers, we can be satisfied with this answer because it proves that the study participants were engaged and aware of the purpose of the research study and that they thoughtfully considered their answers.

In the next question the students were asked to rank their preferred course topics by assigning numbers to them (1 most important, 5 least important). At first glance this question is very similar to the previous one and may appear redundant because it is logical to assume that the students will prefer those topics that they indicated in the previous question as the most important for their courses. However, that is not necessarily the case, and the criteria used for this question and the previous one do not need to be the same. In the previous question the study participants could use the "objective" criteria of the importance of singing assigned to it in the course syllabus, while here they were expected to use "subjective" criteria, i.e. their opinion about the course topics, instead of the importance imposed by the course syllabus.

Rankings for singing			
Rank	f	%	
1	194	63.2	
2	56	18.2	
3	29	9.4	
4	28	9.1	
Total	307	100.0	

Table 11. The position of singing in the students' rankings

Singing was placed first by 194 students, or 63.2% of them, second by 56, or 18.2%, and third and fourth by 29 (9.4%) and 28 (9.1%) of the students (Table 11).

Table 12. The position of playing instruments in the students' rankings

Rankings for playing instruments		
Rank	f	%
1	25	8.1
2	93	30.3
3	84	27.4
4	105	34.2
Total	307	100.0

Playing instruments is in the first place for 25 (8.1%), second place for 93 (30.3%), third place for 84 (27.4%), and fourth place for 105 (34.2%) of the students (Table 12).

Rankings for listening to music						
Rank	f	%				
1	36	11.7				
2	83	27.0				
3	98	31.9				
4	90	29.3				
Total	307	100.0				

Table 13. The position of listening to music in the students' rankings

Listening to music is in the first place for 36 (11.7%), second place for 83 (27%), third place for 98 (31.9%), and fourth place for 90 (29.3%) of the students (Table 13).

Rankings for musical games						
Rank	f	%				
1	52	16.9				
2	75	24.4				
3	97	31.6				
4	83	27.0				
Total	307	100.0				

Table 14. The position of musical games in the students' rankings

Musical games are in the first place for 52 (16.9%), second place for 75 (24.4%), third place for 97 (31.6%), and fourth place for 83 (27%) of the students (Table 14).

Tables 11, 12, 13, and 14 show us that *singing* was ranked first by most of the students (194 = 63.2%). *Musical games* were ranked first by considerably less students – 52 (16.9%), *listening to music* by 36 (11.7%), and *playing instruments* by 25 (8.1%) of the students.

If we compare the answers to the sixth and seventh question, with a note that the "objective" criteria were used for the sixth and the "subjective" criteria for the seventh question, we get the following table:

	The	most	Course	topic
	importai	nt course	ranked f	irst
	topic for	r teaching		
	music co	ourses		
ANSWER	f	%	f	%
Singing	206	67.1	194	63.2
Listening to music	50	16.3	36	11.7
Musical games	31	10.1	52	16.9
Playing instruments	20	6.5	25	8.1
Total	307	100.0	307	100.0

Table 15. Rankings of specific course topics according to the students' objective and subjective evaluation criteria

As shown here, the study participants evaluated the course topics with the same result, whether they were using "objective" or "subjective" criteria. *Singing* is definitely in the first place, and *playing instruments* in the last place. The fact that according to "objective" evaluations *listening to music* is in the second place, and according to the "subjective" criteria *musical games* are in the second place could also indicate that our thesis about the objective and subjective criteria is very likely. *Listening to music* is

definitely more important than *musical games* in the course syllabus. The students obviously do not believe the same.

In the eighth question the students were asked to state the musical course which they believe especially contributed to their competence for teaching music.

Table 16. Musical courses which the students believe especially contributed to their competence for teaching music

The course that especially contributed to students'								
competence for teaching music								
Answer	f	%						
Teaching Methods for	219	71.4						
Teaching Music								
Music Exercises/Playing	69	22.3						
Instruments								
Musical Education	16	5.2						
Music Theory	2	0.6						
Attending music school at	1	0.3						
earlier age								
Total	307	100.0						

Answers from the participants are completely expected here. Teaching Methods for Teaching Music is the most important by far, and 71.4% of the study participants consider it as such, while Music Exercises/Playing Instruments is in the second place (22.3% of the participants). Musical Education and Music Theory are practically insignificant, especially Music Theory, which is considered to be important by only two study participants. The fact that attending music school is considered irrelevant is the consequence of the situation in which an insignificant number of students have that kind of experience. Students who never attended music school simply cannot know the fact that is perfectly clear here: Completing (at least) primary music school would be an almost ideal basis for successful musical training of primary education teachers. We believe that study participants did not place *Teaching Methods for Teaching Music* so highly in the rankings because of its "theoretical" part, but that they did it because the course provides them with practical musical skills: They are learning and becoming familiar with songs that they then sing along an instrument; they also listen and become familiar with compositions. Teaching Methods then becomes a course in which they are not only learning *how to do something*, but also the course where they are becoming familiar with the content for which there was not enough time during other courses, or because those other courses were poorly set up, with over-expressed verbal elements and no practical benefits.

In the ninth question the students were asked to name a music course which they believe is not necessary at the class teacher studies because it had no effect on their competence for teaching music. The results are shown in Table 17.

Unnecessary music courses		
Answer	f	%
All of them are necessary	253	82.4
Music Theory	23	7.5
Musical Education	12	3.9
Listening to Music	10	3.2
Teaching Methods for Teaching	4	1.3
Playing Instruments	3	1.0
Music Exercises	2	0.7
Total	307	100.0

Table 17. Music course that the students believe is not necessary at the class teacher studies

The large majority of the students (82.4%) believe that all of the courses are necessary. It is worth pointing out that the study participants were not critical enough. If they declared that courses *Musical Education* and *Music Theory* are practically useless for their competence in their previous answers, it is reasonable to expect that they would repeat that here. The reason why they did not do so probably reflects a certain amount of conformism, even opportunism: It is not easy to directly say *this course in unnecessary*, even when one believes so. But the trend is still visible: If we count the small number of study participants who dared to say that some courses are unnecessary, we can still see that the two mentioned courses are at the top of the list: *Musical Education* and *Music Theory*.

The students' answers to the tenth question – *Do you believe that there are enough music courses at the class teacher studies* – are shown in Table 18.

Students' opinions on the number of							
music courses at the class teacher							
studies							
Answer	f	%					
Yes	256	83.4					
No	51	16.6					
Total	307	100.0					

Table 18. Students' opinions on the number of music courses at the class teacher studies

Most of the students (83.4%) provided a conformist response to this question as well. However, considering their total knowledge about music, it is difficult to expect that they will be able to provide a more critical perspective on the matter, i.e. that they will have the ability to realistically say what parts of the music courses should change to make the course better.

The few students, who in the tenth question said that there are not enough music courses, or that something should change, expressed their opinions about the necessary changes in the eleventh question. For the sake of clarity, we arranged them in the following categories: *singing and playing instruments, singing, playing instruments, issues regarding teaching methods, number and the amount of classes as part of music courses,* and *introducing new courses.* Due to the amount of the information we will not show them here, but their suggestions lead to the conclusion that the students have noticed the problem correctly. All of their suggestions, almost without exception, are related

to musical practice: They need more singing, more listening to music, more practical teaching methods exercises. None of the suggestions are related to *Music Theory* or *Musical Education*, or any similar "verbal" course.

In the last question of the survey questionnaire – *Is it necessary to test musical pitch at the entrance exams for class teacher studies* – the study participants expressed their opinions on a scale of 1 to 5, where 1 means *completely irrelevant*, and 5 means *very relevant*.

Table 19. Opinions of students regarding the testing of musical ability at the entrance exams

Opinions of students regarding the							
testing of	musical	ability	at the				
entrance exams							
Mark	f	%					
1	24	7.8					
2	29	9.4					
3	88	28.7					
4	77	25.1					
5	89	29.0					
Total	307	100.0					
Average mark 3.58							

A large majority of the study participants, 254 (83%) in total – these are the ones that circled degrees 3, 4, and 5 – believes that testing of musical abilities at the entrance exams is important or even very important, which means that they would introduce it (Table 19). The students have obviously noticed that a certain number of primary education teacher candidates do not have the adequate prerequisites to successfully complete the music courses and later teach music.

In order to check if there are any differences between the students in Osijek, Slavonski Brod, Petrinja, Čakovec, and Zagreb regarding their feelings of preparedness for teaching music courses (and specific topics), how much time they intend to spend teaching *musical games* and *active listening to music* in class, and their attitudes on the importance of testing musical pitch at the entrance exams, we conducted a one-way analysis of variance. The results are shown in Table 20.

Table 20. Results of one-way analyses of variance for the preparedness self-evaluations regarding teaching music courses (and specific topics), the intention to teach musical games and active listening to music, and the attitude on the importance of testing musical pitch at entrance exams

Faculty	Osijek		Slavons	ki Brod	Petrinja		Čakove	с	Zagreb		F
Statements	М	Σ	М	σ	М	σ	М	σ	М	σ	
Preparedness for teaching music education courses	4.2394	0.68587	4.0800	0.57155	4.3913	0.49901	4.4655	0.62732	4.2231	0.70728	2.158
Preparedness for playing the piano/synthesizer/guitar/accor dion	3.9718	0.92539	3.6000	1.08012	4.4348	0.58977	4.1724	0.79776	4.0154	0.88032	3.202* p<0.05
Preparedness for playing percussion instruments	4.0000	0.92582	4.0000	1.00000	4.3478	0.83168	4.2586	0.80699	4.2000	0.90989	1.255
Preparedness for singing	3.9718	1.08195	3.9600	1.13578	4.1739	1.02922	4.1552	0.87463	4.1231	0.99624	0.480
Preparedness for musical games/elements of musical creativity	4.5775	0.73020	4.4400	0.71181	4.5652	0.58977	4.2414	0.88477	4.2077	0.85087	3.192* p<0.05
Preparedness for listening to music	4.4366	0.71179	4.2400	0.83066	4.4783	0.59311	4.7586	0.43166	4.5154	0.68466	3.345* p<0.05
Using musical games in teaching music education courses	4.9155	0.28013	4.5200	0.58595	4.7391	0.44898	4.3103	0.75410	4.5077	0.64994	9.742*** p<0.001
Teaching active listening to music in music education courses	4.6338	0.59135	4.3600	0.63770	4.4348	0.50687	4.6724	0.50914	4.7000	0.55195	2.764* p<0.05
Necessity for testing musical pitch	3.7887	1.10732	3.6800	1.18040	3.6522	1.11227	4.3448	0.90905	3.0923	1.22282	13.345*** p<0.001

A shown above, there were statistically significant differences between students from individual faculties regarding the self-evaluation of preparedness for *playing a backing instrument* (F = 3.202, p<0.05), for *musical games/elements of musical creativity* (F = 3.192, p<0.05), and for *listening to music* (F = 3.345, p<0.05). Also, students from individual faculties are different in their evaluations of the time they will spend teaching *musical games* (F = 9.742, p<0.001) and *active listening to music* (F = 2.764, p<0.05), and also regarding their attitudes on the importance of testing musical pitch at entrance exams (F = 13.345, p<0.001).

The *Scheffe test* was used to determine between which groups there were statistically significant differences. Significant differences and their direction are shown in Table 21.

	Better/more	Worse/less
Preparedness for playing a backing instrument	Petrinja	Sl. Brod
Preparedness for musical games/	Ociick	Zagrah
elements of musical creativity	Osijek	Zagreb
Preparedness for listening to music	Čakovec	Osijek, Sl. Brod
Intention of teaching musical comes	Osijek	Sl. Brod, Čakovec, Zagreb,
intention of teaching musical games	Petrinja	Čakovec
Intention of teaching active listening	Zagreb	Sl. Brod
Necessity for testing musical pitch	Osijek	Zagrah
at entrance exams	Čakovec	Zagieu

Table 21. Statistically significant differences (from Table 20) and their direction

The post hoc analysis (*Scheffe test*) has shown that:

- Students in Petrinja feel more prepared for *playing a backing instrument* than the students in Slavonski Brod. Other comparisons were not significant.

- Students in Osijek feel more prepared for *musical games/elements of musical creativity* than the students in Zagreb. Other comparisons were not significantly different.

- Students in Čakovec feel more prepared for *listening to music* than students in Osijek and Slavonski Brod. Other comparisons were not significantly different.

- Students in Osijek intend to teach *musical games* in class more often than students in Slavonski Brod, Čakovec, and Zagreb, and also, students in Petrinja intend to do it more often than students in Čakovec. Other comparisons were not different.

- Students in Zagreb intend to teach active listening to music more often than students in Slavonski Brod. Other comparisons were not different.

- Students in Osijek and Čakovec believe that testing musical pitch at entrance exams is more important than students in Zagreb. Other comparisons were not different.

Analyses of variance shown in Table 20, and the small number of active differences from Table 21, show that there are actually no relevant differences between students from the examined faculties. The fact that the students in Petrinja, for example, feel more prepared for playing a backing instrument than students in Slavonski Brod cannot be an indicator of a more significant difference if there are no differences between them and the students from other teacher education faculties. The result seems to be that "statistically significant differences" between the students of different teacher education faculties from Table 21 are more the product of some random statistical circumstances than an indicator of relevant differences between teacher education faculties.

In order to determine if there are differences between the students regarding the course topics that will be most important in their music courses, we used the χ^2 test. We found no significant differences in the frequency of individual answers (χ^2 (12) = 18.41, p>0.05).

In order to check if the students' evaluations are different regarding the time spent in class *playing a backing instrument*, we used the nonparametric *Kruskal-Wallis test*. The results are shown in Table 22.

Faculty	Osijek	Slavonski Brod	Petrinja	Čakovec	Zagreb	χ ²
How much time will you spend playing a piano/synthesizer /guitar/accordion in music classes?	140.53	95.82	147.57	155.29	173.11	28.504, p<0.001
N = 307						

Table 22. Results of the Kruskal-Wallis test for playing a backing instrument

As shown above, the *Kruskal-Wallis test* indicated that there is a statistically significant difference (χ^2 = 28.50, p<0.001) between the students from different faculties.

In order to determine between which faculties the differences are significant, we calculated a series of *Mann-Whitney tests*. Those tests have shown that:

- Students in Slavonski Brod intend to spend significantly less time in class *playing a backing instrument* than students at all the other examined studies (Osijek z = -2.58, p<0.05; Petrinja z = -2.20, p<0.05; Čakovec z = -3.29, p<0.01; Zagreb z = -5.09, p<0.001)

- Students in Osijek intend to spend significantly less time in class *playing a backing instrument* than students in Zagreb (z = -3.28, p<0.01).

Of these two pieces of information, only the first one could be really relevant, not only statistically significant: If the students from one of the studies are significantly 332

different than students from all the other studies, this could indicate that there is really a difference that is probably the result of the quality of classes at the appropriate course, which would be *Playing Instruments* in this case. The other piece of information – that the students from Osijek will play instruments less than students in Zagreb – cannot be relevant if the students from Osijek are not at the same time different from students from other examined class teacher studies in that regard.

In order to check if the students are different in ranking their preferences for course topics (*singing, playing instruments, listening to music,* and *musical games/elements of musical creativity*), *Kruskal-Wallis tests* were also conducted. The results are shown in Table 23.

Faculty	Osijek	Slavonski Brod	Petrinja	Čakovec	Zagreb	χ^2
Singing	145.82	152.14	147.15	151.12	161.32	2.291
Playing instruments	184.06	188.40	132.57	147.72	137.56	19.742, p<0.01
Listening to music	143.42	164.86	182.87	144.48	156.83	5.012
Musical games/ elements or musical creativity	140.79	113.98	153.80	170.81	161.45	10.40, p<0.05
N = 307						

Table 23. The results of Kruskal – Wallis tests for singing, playing instruments, listening to music, and musical games/elements of musical creativity

As shown above, significant differences in rankings appeared for *playing instruments* (χ^2 =19.74, p<0.01) and *musical games/elements of musical creativity* (χ^2 =10.40, p<0.05). In order to check between which groups there are significant differences, a series of *Mann-Whitney tests* were conducted for *playing instruments* and *musical games/elements of musical creativity*.

Mann-Whitney tests have shown that:

- Students in Osijek ranked *playing instruments* lower than students in Petrinja (z = -2.49, p<0.05), Čakovec (z = -2.37, p<0.05), and Zagreb (z = -3.80, p<0.001)

- Students in Slavonski Brod also ranked *playing instruments* lower than students in Petrinja (z = -2.20, p<0.05) and Zagreb (z = -2.75, p<0.01)

- Students in Slavonski Brod ranked *musical games/elements of musical creativity* higher than students in Čakovec (z = -2.71, p<0.01) and Zagreb (z = -2.54, p<0.05).

These results also do not indicate any systematic differences, so it can be said that there are no relevant differences between students from different studies in ranking music course topics.

4. Conclusion

The students are mostly unaware of their low musical competence. Moreover, they evaluated their preparedness for teaching music in primary education with high marks, in general and for individual course topics. There are several reasons for these incorrect self-evaluations: On one hand, it is the lack of criteria that is the result of very low general knowledge in the area of music as a form of art (which should have been acquired earlier in education), and on the other hand, the stereotypical attitude that music courses in primary education are not something that requires some special musical competence. The musical level of the student population in general should also be added to it; the students will evaluate themselves in relation to their, equally competent or incompetent, colleagues. The students had no relevant complaints against the current system of musical education for primary education teachers. However, they did emphasize the need for more practical training, primarily playing instruments and singing. Namely, musical competences of primary education teachers cannot be determined otherwise then in relation to the course plan and programme for music courses in the first three grades of primary school. According to the primary school programme created as part of the HNOS (Croatian National Educational Standard) project, music courses in primary education should be viewed as the preparation for the part of primary school when the music courses will be taken over by specialist, i.e. course specific teachers (National Plan and Programme for Primary School, 2006). This then means that it will be enough for children in primary education to sing as much as possible and as well as possible, to listen to well selected music as much as possible, and to play with a musical background in various ways. The students declared that Teaching Methods for Teaching Music is the key course for training future teachers to teach music. The students are also satisfied with the number of classes dedicated to music courses, with a note that they are in favour of reorganising the course content in the direction of increasing the number of practical classes and reducing the number of theoretical classes. Large majority of the students believe that testing musical ability at entrance exams is important or even very important, which means that they would introduce it.

What is the cause of musical incompetence of students at class teacher studies? Learning music has some specific features and those set it apart from all the other courses at the class teacher studies. All of the courses, aside from music, can be studied normally after completing secondary education. Music studies require special skills that cannot be acquired as part of general education, and those include the skill in playing instruments and musical literacy. Considering the specifics of adopting musical knowledge and skills, some level of musical literacy and some level of skill in playing instruments are the conditions for starting musical studies at the class teacher studies, but the majority of students will enrol without any previous musical

education. Unfortunately, the current situation with the time allotted for music as part of class teacher studies does not allow the appropriate preparation for the relevant studies and for the proper music studies akin to those conducted at music academies. Considering the current conditions, it is necessary to change the concept of learning music at class teacher studies. Without drastically increasing the number of classes or setting conditions where students could enrol at the studies only with certain previous musical competence (for example, after completing/at least/ primary music school), this situation cannot be changed. Since the realisation of the mentioned conditions cannot be realistically expected – even just one of the conditions, let alone both of them – learning music should be set up in a way that would allow future primary education teachers to get the most practical use from it. Instead of dividing it into courses, music at class teacher studies should be taught in groups according to the group teaching model. As part of this organisation of music courses at class teacher studies, regardless of how the course will be called – *it would be best to call it Music* – it is important that every music teacher teaches their group of students everything that they will need:

- Singing songs and accompanying it by playing an instrument, and, at the same time, teaching methods and procedures for introducing the song in class,
- Listening to music and getting to know compositions and musical games, and at the same time transferring them to the students by applying teaching methods,
- Learning to play a backing instrument will then be done in a way an amateur learns: There is no playing of scales, technical exercises, etudes, and similar, and the most necessary elements of musical literacy will be adopted at the same time.

The current approach to teaching music being practiced at teacher education faculties is the imitation of professional musical education, which we can say follows the path *from theory to practice*. In class teacher studies, where not enough time is devoted to music courses, this approach cannot be effective. Teaching music here must follow the reverse path, i.e. *from practice to theory*, or in other words, in a situation where time is insufficient, music must be learned from music, while adopting the appropriate teaching methods along the way.

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