

THE QUALITY OF COLLABORATION BETWEEN PRIMARY SCHOOL CLASS AND SUBJECT TEACHERS AS A PREREQUISITE FOR IMPROVING THE PROCESS OF INCLUSIVE EDUCATION

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Collaboration is being increasingly perceived as a powerful tool and a foundation for school and teaching improvement, and therefore has become a prerequisite for improving the process of inclusive education. The goal of the research was to identify and explain the differences between male and female primary school teachers in assessing the quality of collaboration, an important prerequisite for creating desirable inclusive environment and the relations between the length of teaching practice and the quality of the collaboration. The research was conducted in the area of five counties of the Republic of Croatia on the sample of 495 respondents. Gender differences in the quality of collaboration were observed through seven composite variables (school collaboration, exchange of experiences, collaboration on curriculum development, communication among the school staff, collaboration in evaluating student performance, school staff collaboration and teaching collaboration) by employing the independent-samples T-test. Significant differences were found in three composite variables. Based on the results, it has been concluded that male teachers participate more in formal models of collaboration (i.e.: Class council, Teacher's council, ...) whereas female teachers are more concerned about the overall collaboration including school climate, and thus the inclusive processes are more comprehensive. Moreover, statistically relevant is the low level of negative connection between the work experience and the composite variable; sharing - the experience has been

confirmed. The quality of collaboration and experience sharing is in accordance with to the work experience. Regarding other composite variables of experience sharing, the quality of collaboration has not been linked to work experience.

Key words: quality of collaboration, gender, school, teachers, inclusive environment

1 Introduction

For nearly half a century collaboration has been a challenge for researchers, and recently this topic has become an imperative considering trends in education. According to De Simone and Parmar (2006), in accordance with the growing complexity and challenges of teaching process, numerous researches have dealt with the development of curriculum, individual student needs, inclusive education and class management, since the postmodern society demands changes in all social structures, including the education policy which should strive to enhancement, and not only to the maintenance of the existing education system. In order to achieve such an ambitious goal, collaborative culture which enhances the acceptance of common goals is essential and it learns from its mistakes and is capable of improving its service (Fumarco, 2006). Hence Dickens (2000) stresses collaboration as a valuable system because it reflects care for every human being, and it presents both duty and justice. In accordance with the above mentioned, the results of various school reforms which have dealt with structure only without paying attention to human and social elements, such as culture, school climate and relations were not satisfactory (Kruse, Seashore and Bryk, 1994; Newmann and Wellhage, 1995). Moreover, Liberman (1986, p. 6) concludes that “context, needs, talents and duties differ, but one thing is constant: schools can not make progress without teacher cooperation”.

The aim of collaboration is student well-being which comes as a result of positive exchange of experiences. For example, teachers' ability to improve efficiency and aims which have been verified by researchers of teacher collaboration are connected with better student results (Goddard, Hoy, and Woolfolk Hoy, 2000; Moore and Esselman, 1992; Ross, 1992). Thanks to university teams literacy is improved (Irwin i Farr, 2004; Richardson, 1996) and student results are maximized through teacher collaboration and professional development (Dufour, Dufour, Eaker i Many, 2006; Englert i Tarrant, 1995). Literature includes descriptions and analyses of school progress process which put collaboration in the position of educational initiative, including the development of inclusive education for students with disabilities (Weller and McLeskey, 2000; Fisher and Frey, 2003), gifted students, students with special needs, students with behaviour disorders and all the groups facing exclusion. Such "expanded" comprehension of inclusive education is the result of the concept of „an effective and inclusive school for all". The above mentioned idea is a process directed towards finding suitable response to the needs of all children, through the affirmation of their participation in all aspects of life in community, reducing the risk of exclusion and marginalization (UNESCO, 2005, in: Ogrizović and Bouillet, 2009). Talking about inclusion in terms of education process we can state that in each case a successful inclusion has depended on professional/ teacher cooperation.

A positive attitude of teachers is a crucial prerequisite of both successful collaboration and inclusive education. Moreover, the success of inclusive education depends on the attitude of teachers (Sharma, Forlin, Loreman i Earle, 2006) since the way in which a teacher prepares the environment for the inclusive education process is extremely important, whether we talk about colleagues, school staff, parents or local community. Education process is always a collective and never an individual achievement, which proves that children satisfy their needs not only through being on

their own but through contact with other participants of education process (Furlan, 2001, cited in: Slunjski, 2008).

Being aware of both the importance of teacher collaboration and the necessity of raising awareness of inclusive education, the question is whether we need to restructure or re-cultivate teacher cooperation? According to Fullan (1999), schools need re-culturing, rather than restructuring. A school culture may be defined as the guiding beliefs and expectations evident in the way a school operates (Fullan, 2007). In order to reform school culture and create a more inclusive school, teachers need to reexamine their beliefs on studying and teaching when it comes to students who struggle to learn and to involve into the learning process, which will result in new values, beliefs, norms and desirable behaviour patterns (Fullan, 2007; McLeskey and Waldron, 2000, 2002a, 2006). Thus, Hausmana and Goldringa (2001) believe that teachers must be a central part of any school reform. On the other hand, there are factors determining teacher success, primarily education policy goals and their achievement. However, “teachers will probably be guided by moral aims and the wish to achieve well-being of all students” (Vican, 2013., p. 22).

Collaboration can not be perceived one-dimensionally, it is a complex, multidimensional construct and as such it is extremely important in creating a positive inclusive education environment which has been a dominant topic of education policies of developed countries in the last two decades (Rafferty, Boettcher i Griffin, 2010). Thus, this paper aims at identifying and explaining the differences between male and female school teachers in assessing the quality of collaboration, which is an important prerequisite for creating a desirable inclusive environment.

2 Methodology

The research was conducted in the area of five counties of the Republic of Croatia (Zagreb County, Primorje-Gorski Kotar County, Osijek-Baranja County, Dubrovnik-Neretva County, and Split-Dalmatia County) on the sample of 495 respondents. Gender differences (male, N=404; female, N= 91) in the quality of cooperation were observed through seven composite variables (*school collaboration, exchange of experiences, collaboration on curriculum development, communication among the school staff, collaboration in evaluating student performance, school staff collaboration and teaching collaboration*) by employing the independent-samples T-test.

For testing the quality of teacher collaboration we used *Teacher Collaboration Quality Scale*, which is a part of the standardized questionnaire *School Quality Scale* (ger. *Skalen zur Schulqualität*, Gerecht, Steinert, Klieme i Dobrich, 2007) which was translated from German. *Teacher Collaboration Quality Scale* comprises seven composite and 44 manifest variables: a) *school collaboration (this subscale comprises 6 items)*, b) *exchange of experiences (9 items)*, c) *collaboration on curriculum development (5 items)*, d) *communication among the school staff (5 items)*, e) *collaboration in evaluating student performance (3 items)*, f) *cooperative teaching and teaching collaboration (9 items)*, g) *school staff cooperation (7 items)*. We used 5 - point Likert scale (1 - once a week, 2 – once a month, 3- many times during one term, 4 - once a year, and 5 – never) for subscales *Exchange of experiences, Collaboration on curriculum development, and Collaboration in evaluating student performance*), as well as 4 - point Likert scale (1 - I do not agree, 4 - I completely agree) for other subscales.

3 Results and discussion

The difference in *Collaboration Quality Scale* with regard to gender are shown in table 1.

Table 1. Gender differences in *Collaboration Quality Scale*, N=495

VARIABLES	1 - MALE (N=91)		2 - FEMALE (N=404)		t-test	P
	M	SD	M	SD		
Teaching collaboration	2,79	0,56	2,89	0,55	-1,52	0,13
School collaboration	3,04	0,64	3,18	0,57	-2,02	0,043*
School staff collaboration	2,81	0,56	2,93	0,55	-1,80	0,07
Collaboration on curriculum development	3,22	0,74	3,01	0,77	2,39	0,017*
Exchange of experiences	2,57	0,75	2,50	0,71	0,94	0,35
Communication among the school staff	3,26	0,70	3,37	0,56	-1,59	0,11
Collaboration in evaluating student performance	2,93	0,70	2,63	0,82	3,24	0,001***

Legend: M – mean; SD – standard deviation; * - statistical significant on level $p < .05$; ** - s statistical significant on level $p < .01$; *** - statistical significant on level $p < .001$.

Significant differences were found in four composite variables. The results show that at the .05 level, there is no significant difference in assessment of the following variables: *teaching collaboration*, *school staff collaboration*, *communication among the school staff and the exchange of experiences*; i.e., that both male and female teachers equally agree on the level of good cooperation.

From the median values we can conclude that male teachers have higher assessment variables *collaboration on curriculum*

development and cooperation in evaluating student performance. The above mentioned variables refer to the collaboration of teachers who teach the same classes, i.e. the collaboration between the teachers who teach the same subjects, who participate in teachers council meetings and study groups, who make plans together, and cooperate on curriculum (Friend i Cook, 2000), which points to the fact that teachers are more inclined to formal collaboration when discussing their profession. This kind of collaboration, however, occurs rarely since it is subjected to protocols, deadlines and techniques predetermined by the school administration, which was confirmed by the results of other researches, too (Lortie, 1975; Little, 1999; Pfaff, 2000; Stokes, 2001).

With regard to the variable *school collaboration*, female teachers have higher assesment than their male colleagues since they have a vision of school which requires spending more free time to think about it, which stresses social dimension of inclusive process (Leyser and Tappendorf, 2001). The results of the research show that female teachers are more inclined to informal collaboration, initiated by themselves, which is in accordance with the research conducted by Gordon (1996). For example, they spontaneously discuss teaching in the hallways, teachers` lounge, and different both public and private places after they have finished working, (Hargreaves, 1994). Consequently, it can be expected that teachers` common goals and values are connected with informal collaboration, as explained by Brook, Sawyer and Rimm-Kaufman, (2007).

The following researches and their explanations point in favour of given results and their interpretations. Namely, the results show that female teachers are more involved into their work, they dedicate more free time to work and the level of collaboration between them is high (Thomas i O'Brien, 1984; Acker, 1992). Moreover, they are more efficient and successful in the realization and fulfilment of their professional duties and roles (Chusmir,

1986). Furthermore, female teachers are more satisfied with their work, more thankful for the number of working hours, and less preoccupied by work and safety issues. On the other hand, male teachers, when comparing teaching to other occupations, seem to detect lower wages and less opportunities for professional promotion (Stevens, 2005; Bender i Heywood, 2006). It is important, though, to stress that the results of some researches did not show gender differences when it comes to work satisfaction (Ziaul i Hossain i Islam, 2005), whereas some results showed that there is no difference at all in attitudes toward inclusive education between male and female teachers (Seçer i Çınar, 2011).

Besides the differences we were interested in knowing is there a connection between the number of teacher's work experience and their own assessment of the quality of teacher collaboration. Distribution of the variable „work experience” is as follows: 0-5 years (80; 16.2 %), 6-10 years (111; 22.4 %), 11-20 years (142; 28.7 %) and 21 years or more (162; 32.7 %). The correlation matrix is shown in Table 2.

Table 2. Correlation: working experience and quality of cooperation

Work experience	School collaboration M	Exchange of experiences	Collaboration on curriculum	School staff collaboration	Collaboration in evaluation	Teaching Collaboration
Pearson Correlation	-,045	-,157**	-,026	-,080	-,032	,001
Sig. (2-tailed)	,319	,000	,568	,076	,479	,990

***Correlation is significant at the 0.01 level (2-tailed).

As shown in Table 2, there is a statistically relevant low negative connection between work experience and composite variable of experience sharing. Connection in other composite variables has not been confirmed. Keeping in mind low levels of correlations are present and the sample size is large, one should be careful when making general conclusions (with the value N, the low r values

become statistically relevant, thus increasing the beta error). Moreover, low level of correlation do not allow group assessments. In compliance with the given results, work experience is mostly not a correlation of the quality of collaboration.

The results of this research are possible to explain with *experience-based learning*, i.e. a higher degree of fellowship between teachers who have less work experience. The explanation for this can be found in claims that regularity and frequency both affect achieving a certain level of cooperation (Howden and Kopiec. 2002), fellowship being the highest.

With the number of years inservice, work experience grows, which in return lessens the need for frequent cooperation.

4 Conclusion

Teacher collaboration is being increasingly perceived as a foundation for school and teaching improvement, and therefore has become the prerequisite for improving the process of inclusive education. In order to create a more inclusive school teachers are to question their attitudes towards studying and teaching since the aim of collaboration is the well-being of every student.

The results show that there is no significant difference in assessment of the following variables: *teaching collaboration, school staff collaboration, communication among the school staff and the exchange of experiences*; i.e. that both male and female teachers equally agree on the level of good cooperation.

In regard to *collaboration on curriculum development and cooperation in evaluating student performance*, the results show that male teachers are more likely to informally collaborate in situations which come as a result of a protocol or decisions of the school administration, whereas in the variable *school collaboration* female teachers have higher assessment than their male colleagues

who participated in this research, which stresses the social dimension of the inclusive process. Female teachers are more inclined towards informal cooperation which is suitable for creating an inclusive environment.

According to the results of the correlational analysis, years of service are mostly not in correlation with the quality of collaboration, i.e. young teachers, beginners, have a higher degree of interaction which appears mainly during the problem solving and planning, as well as insisting on building cooperative relationships.

Based on the obtained results, it can be concluded that it is necessary to provide future teachers with different forms of professional development (sessions, debates, study groups) which will additionally inform them about the importance of collaborative learning and teaching, as well as the importance of inclusive education.

In order to gain a full perspective on the topic, some other factors, such as age, the level of education, the length of service and the work place, should also be included into research. The above mentioned short comings of this research open new possibilities for future research.

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