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Theory and Practice of Integrated Education from the Perspective of University Teachers: How Much Do We Really Know?

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Abstract

The integration of children with disabilities into the regular school system is a process that requires changes at multiple levels. It requires, among other things, a change in attitudes and behaviour at the broader level of the community. In order for this to be possible, it is also necessary to implement training of teachers in the area of the characteristics of development and the particularities of upbringing and education of such children. The aims of this study were to determine the degree of familiarity with theoretical and practical concepts related to integrated education of children with disabilities and the differences in understanding certain concepts with respect to the years of work experience of university teachers. The study used a modified questionnaire of the ESERakad Tempus Project - Education for Equal Opportunities at Croatian Universities-EduQuality. The survey was conducted on the sample of the teachers of the Juraj Dobrila University of Pula (N = 104). In the stage of data processing, in addition to the calculation of marginal frequencies, discriminant analysis was used. The results have shown that the teachers have deemed only 25% of the statements to be true and that the teachers, with respect to their work experience, mostly differ in the fact that those with less than 20 years of work experience tend to recognize more statements as true, unlike their colleagues with longer work experience. The results point to the need for expansive education of university teachers in the area of theoretical and practical concepts related to integrated education.

Key words: education; integration of children with disabilities; teacher education; university; upbringing.

Introduction

The integration of children with disabilities into the regular school system is a process which calls for changes at multiple levels. Among other things, it requires a change in the attitudes and behaviour at the broader level of the community. In order for this to be possible, there is also a need for education in the area of particularities in the development, upbringing and education of such children. The educational system is by all means an area in which differences must be recognized and appreciated. Within that context, the integration of children with disabilities poses a challenge to teachers in the process of education they are conducting.

In the modern age, especially in the second half of the 20th century, ethical justification of the separation of children with disabilities from the regular student population began to be questioned. After that, following the integration concept, there were attempts to include the persons with disabilities into the community. Somewhat later the inclusion concept implied a complete inclusion of persons with disabilities into the broader community, as well as proclaiming their rights equal to the rights of the general population (Radetić-Paić, 2013).

The success of the integration process depends to a great extent on the readiness of teachers to accept children with disabilities and to employ appropriate methods of education. The teacher is the one who implements, questions and alters curricular requirements in accordance with students' abilities, knowledge, interests and needs, while at the same time interacting with them. That is why the teacher has a key role in the process of integration of children with disabilities (Stančić & Ivančić, 1999; Malone et al., 2001). A negative attitude towards integrated education may be an obstacle to the integration of children with disabilities into the regular system of education (Cawley et al., 2002), while some authors emphasize the fact that teachers' attitudes towards integration and inclusion are still negative (Žic & Igrić, 2001).

Teachers are frequently insufficiently informed or they are misinformed about the concept of integration and/or inclusion (Dimitrova-Radojičić & Čičevska-Jovanova, 2013), as well as about other theoretical and practical concepts related to the above mentioned terms. Therefore, it can be concluded that they are not sufficiently competent for inclusive practice (Bouillet, 2011). Within that context, an important condition for reducing the uncalled-for reactions of teachers to segregation of persons with disabilities is their education at the university level, as well as their lifelong education (Tomić, 2007; Loborec & Bouillet, 2012).

The research conducted by Avramidis and Norwich (2002) proved the general positive attitudes of teachers to inclusion, but there was no evidence of the acceptance of the complete (real) inclusion. It was determined that the teachers' attitudes are strongly influenced by the nature and the level of disabilities of a particular child, but not so strongly influenced by factors which teachers themselves can control.

Finally, little research has been conducted into how familiar university teachers are with these issues. During the past few years a Tempus Project – Education for Equal Opportunities at Croatian Universities-EduQuality was involved in this area. This

project, carried out by the University of Zagreb, in association with the Committee for Students with Disabilities and Office for Students with Disabilities, was monitoring the knowledge of theoretical and practical concepts related to integrated education at the academic level of education. Within educational workshops (Kranželić, 2012), the changes had been measured before the beginning of university teachers' training and 3-4 weeks upon completing it. The results have shown that, with respect to the point in time when the measuring was implemented, upon completing this type of training university teachers expressed greater readiness to adjust higher education to students with disabilities, better preparation for work, less sympathy and relenting, and lesser tendency towards positive discrimination.

Objectives, Hypothesis and Purpose of Research

The objectives of this research were to determine the knowledge of theoretical and practical concepts related to integrated education of children with disabilities, as well as the differences in understanding certain concepts with respect to the years of work experience of university teachers.

The following hypothesis was tested: among university teachers there are significant differences in recognizing whether certain theoretical and practical concepts related to integrated education of children with disabilities were true, with respect to the years of work experience of the teachers.

The hypothesis had been grounded on the assumption that there is a connection between the knowledge of theoretical and practical concepts related to integrated education of children with disabilities and the previous experience of integration in the broader sense. It was presupposed that the teachers with fewer years of work experience would be better acquainted with the concepts related to integration, since integration is a process that has intensified over the past few years. New generations of children and teachers have experienced the pressure related to integrated education to a greater extent than the older generations (Avramidis et al., 2000; McKinnon & Gordon, 1999; Paterson & Graham, 2009). The younger generation has faced a greater responsibility and greater challenges in that area (Westwood & Graham, 2003), and has been directly or indirectly exposed to the adjustment of the teaching methods (Peterson & Beloin, 1992).

For that reason the purpose of this research is to determine the extent to which university teachers are familiar with certain concepts related to integrated education of children with disabilities, in order to be able to, through proper and timely training of specific groups of teachers, prevent the negative consequences of ignorance in the field of adjustment of teaching methods to students with disabilities and acceptance of these students at the academic level.

Methods

Sample

The systematic sample of respondents consisted of 104 teachers of the Juraj Dobrila University of Pula.

Table 1
Gender of the respondents

Gender	Abs.	%
Male	35	33.7
Female	69	66.3

The research included 66.3% female teachers and 33.7% male teachers. Therefore, there were more females than males (Table 1).

Table 2
The respondents' age

AGE	Abs.	%
Up to 30 years of age	8	7.7
30-40 years	46	44.2
40-50 years	25	24.0
50-60 years	15	14.4
Older than 60	10	9.6

Most of the respondents were aged 30 – 40, while the lowest number of them were under the age of 30 (Table 2).

Table 3
The respondents' position

POSITION	Abs.	%
Associate	40	38.5
Scientific-teaching	49	47.1
Teaching	10	9.6
Artistic-teaching	5	4.8

Almost a half of the respondents hold the scientific-teaching positions of assistant professor, associate professor, full professor, while the lowest number of respondents hold the artistic-teaching position (Table 3).

Table 4
Respondents classified with respect to the Faculty and Departments

FACULTY AND DEPARTMENTS	Abs.	%
The Faculty of Economics and Tourism "Dr Mijo Mirković"	29	27.9
Department of Preschool and Primary School Teaching	39	37.5
Department of Humanities	23	22.1
Department for Studies in Italian Language	13	12.5

Table 4 shows that the greatest number of respondents were from the Department of Preschool and Primary School Teaching and from The Faculty of Economics and Tourism "Dr Mijo Mirković", then from the Department of Humanities, while the lowest number of respondents were from the Department for Studies in Italian Language.

Table 5
Respondents with respect to years of work experience

WORK EXPERIENCE	Abs.	%
up to 20 years	86	82.7
over 20 years	18	17.3

With respect to years of work experience the respondents were not evenly distributed, and there were more respondents with up to 20 years of work experience (Table 5). The above mentioned should be taken into account as a possible limitation during the process of data interpretation.

Item Sampling

The research employed a modified questionnaire from ESERakad Tempus Project - Education for Equal Opportunities at Croatian Universities-EduQuality, approved by the project leader, and consisting of 24 items the truthfulness of which the respondents were supposed to estimate on a three-point scale (I disagree – I cannot decide – I agree). The questionnaire contained the heading with the introduction and general guidelines for filling it in.

Data Processing Methods

In data processing stage, besides the calculation of marginal frequencies, discriminant analysis was used, which is a constituent part of the SPSS program.

Data Collection Method

The research was carried out at the beginning of 2014 by using the questionnaire method with teachers at the Juraj Dobrila University of Pula. The questionnaire guaranteed anonymity and was used for the purposes of scientific research and informing particular constituents about the research results. A precondition for the distribution of questionnaires to university teachers was the approval obtained by the chairs and heads of Departments and Faculties.

Results and Discussion

Taking into consideration the statements which over 75% of teachers deemed to be true, only 25% of them were recognized as true at a high rate of recognition (Table 6). The chosen items are presented according to the level of truthfulness, while some of them differ from the questions in the questionnaire due to negative or positive connotations.

The differences in being acquainted with certain concepts with respect to the years of work experience of university teachers were examined by employing discriminant analysis in order to gain insight into latent dimensions of these differences. The prior testing of data distribution via the Kolmogorov-Smirnov test indicates the normal data distribution (min. Sig. = .243 > .05).

Table 6

Distribution of respondents with respect to the level of truthfulness of agreement /disagreement with the given statements; a high level of congruence.

ITEMS	%
Dyslexia is not an excuse for laziness.	97.1%
Students who cannot speak cannot be included into the school system.	86.5%
Blind student can take part in team sports.	82.7%
Deaf students can master foreign languages.	77.9%
Deaf students can cope better during lessons if they are given the teaching materials beforehand.	76%
Dyslexia is not an illness.	75%

Discriminant analysis was applied to the group of items used to describe particular theoretical and practical concepts related to integrated education of children with disabilities. Since discriminant analysis was applied to only two groups of respondents (teachers with less than twenty years of work experience and teachers with more than twenty years of work experience), one discriminant function was obtained, which, as Table 7 shows, is statistically significant at the level $P=.05$ and discriminates the observed groups of respondents. A well expressed canonical correlation which can be seen in the same table indicates a relatively good practical discriminating power of that function.

Table 7

Characteristic root and Wilk's Lambda

Discriminant function	% variance	Cumulative variance in %	Canonical correlation	Wilk's Lambda Λ	χ^2	df	p
1	100	100	.586	.656	37.890	24	.036

Table 8

Standardized canonical discriminant function coefficient (C) and matrix structure (S)

ITEMS	C	S
1. Having assistants in teaching partly means that they would perform some tasks instead of students with disabilities.	-.222	.035
2. Dyslexia is an excuse for laziness.	.445	.524*
3. In school system it is much easier to enable access to information to blind students than to those with visual impairment.	.379	.205
4. Deaf-blind students cannot hear and see at all.	.125	.049
5. Dyslexia is an illness.	.338	.324
6. A greater number of psychiatric disorders emerge in childhood.	.102	.222
7. Deaf students cannot master foreign languages.	.088	.207
8. Blind students cannot take part in team sports.	-.006	.105
9. Students suffering from dyslexia have no difficulties in learning maths.	.046	.115
10. In order to cope more easily, students suffering from dyslexia prefer texts to be aligned to the right.	.156	.000
11. Blind students can hear better than other students.	-.314	.123

12. Guide dogs lead visually impaired students around obstacles.	-.348	.100
13. If students with hearing impairment sit in the front row, they have no difficulties in taking notes at lectures.	-.147	.064
14. Blind students cannot communicate via e-mail and text messages.	-.157	.018
15. Mute students cannot be integrated into the school system.	.365	.465*
16. Adjusted curricula for children with disabilities are mainly implemented in educational institutions ("special" schools).	.384	.469*
17. Deaf students most frequently use manual alphabet in communication.	.324	.307
18. Students who stutter should be relieved of delivering oral presentations in public.	.025	.044
19. Anorexia is the most lethal psychiatric disorder.	.129	.103
20. The accuracy of lip reading in Croatian is about 30%.	-.342	-.112
21. Deaf students will cope better in lessons if they are given the teaching materials beforehand.	.267	.076
22. Deaf-blind students find their way around using a red and white cane.	.275	.215
23. Flashing and vibrating web content may cause epileptic seizure in students with epilepsy.	-.329	-.156
24. Students with dyslexia should be granted extra time to hand in their written assignments.	.400	-.030

*DF

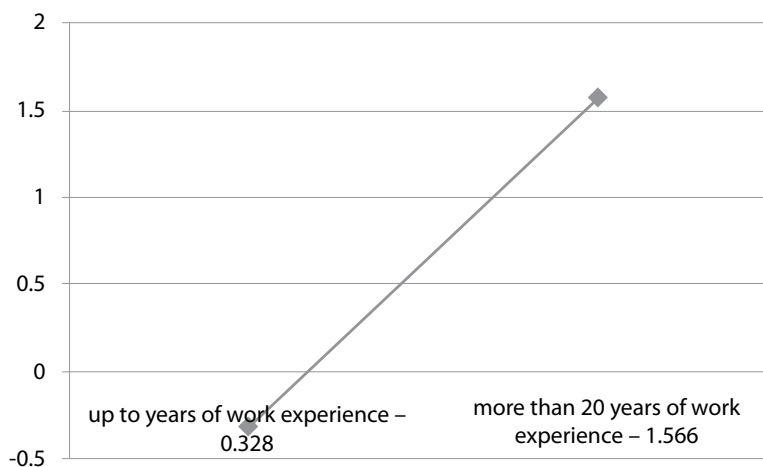


Figure 1. Group centroids

The data presented in Table 8 and Figure 1 show that teachers, with respect to the years of their work experience, differ from one another in assessing the features of dyslexia (item 2) and possibilities of integration of children with disabilities into the regular school system (items 15 and 16). Teachers with less than twenty years of work experience are more likely to recognize certain concepts as true, unlike their colleagues with more years of work experience.

Conclusion

Based on the obtained data, it can be generally concluded that, within the observed sample, university teachers do not possess sufficient knowledge of concepts related to

integrated education of children with disabilities, and it can be indirectly assumed that they do not possess sufficient knowledge of very similar concepts related to students with physical impairments either. The results have also revealed that teachers with less than twenty years of work experience are more likely to recognize certain concepts as true, unlike their colleagues with more than twenty years of work experience, which has confirmed the initial hypothesis. It is assumed that earlier exposure to integrated education in the broad sense contributes to greater knowledge of concepts related to integrated education. The above mentioned can be corroborated by the research carried out by Macura-Milovanović and Vujisić-Živković (2011), who have concluded that negative attitudes of the future teachers towards inclusion of students with disabilities are partly a consequence of their previous experience of education in classes which did not include children with disabilities.

On the other hand, research carried out into educational practice (Havey, 2007) has shown that the quality of the process of education depends on the manifestation of the teachers' professional competencies, which have a significant impact on the way in which children behave, and which also include the knowledge of theoretical and practical concepts related to integrated education. In that sense, there is a need for training teachers, that is, for providing teachers at universities with suitable expert support.

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Teorija i praksa integriranog odgoja i obrazovanja iz perspektive sveučilišnih nastavnika: koliko uistinu znamo

Sažetak

Integracija djece s teškoćama u razvoju u redoviti školski sustav proces je koji zahtijeva promjene na više razina. Između ostalog zahtijeva i promjenu stavova i ponašanja šire zajednice, a da bi to bilo moguće, i edukaciju o osobitostima razvoja i specifičnostima odgoja i obrazovanja djece. Ciljevi ovog istraživanja bili su utvrditi poznavanje teorijskih i praktičnih pojmova vezanih uz integrirani odgoj i obrazovanje djece s teškoćama u razvoju, kao i razlike u poznavanju pojedinih pojmova kod sveučilišnih nastavnika s obzirom na godine radnog staža. U istraživanju je upotrijebljen modificirani upitnik ESERakad Tempus Projekta – Education for Equal Opportunities at Croatian Universities-EduQuality. Istraživanje je provedeno među nastavnicima Sveučilišta Jurja Dobrile u Puli (N=104). U obradi podataka, uz izračunavanje marginalnih frekvencija, korištena je diskriminacijska analiza. Rezultati su pokazali da svega 25% tvrdnji nastavnici prepoznaju kao točne i da se nastavnici međusobno najviše razlikuju s obzirom na duljinu radnog staža. Naime, nastavnici s manje od dvadeset godina staža u većoj mjeri prepoznaju određene pojmove kao točne za razliku od nastavnika s većim stažem. Rezultati ukazuju na potrebu veće edukacije sveučilišnih nastavnika u poznavanju teorijskih i praktičnih pojmova vezanih uz integrirani odgoj i obrazovanje.

Ključne riječi: *djeca s teškoćama u razvoju; edukacija; integracija; obrazovanje; odgoj; sveučilište.*