Revija za elementarno izobraževanje

Journal of Elementary Education

Revija za elementarno izobraževanje
Journal of Elementary Education

Volume 18   Number 2   June 2025

Kazalo / Table of Contents

Prispevki / Articles

DEVELOPMENT AND PRELIMINARY VALIDATION OF THE ACTIVE CITIZEN COMPASS QUESTIONNAIRE: THE DUTCH–FLEMISH AND GREEK VERSIONS

VANA CHIOU[1] & OLIVER HOLZ[2]

[1]University of the Aegean, Department of Geography, Mytilene, Greece
[2]KU Leuven, Faculty of Economics and Business, Brussels, Belgium

CORRESPONDING AUTHOR/KORESPONDENČNI AVTOR
b.xiou@aegean.gr

Abstract/Izvleček

This study aimed to develop a questionnaire for assessing teachers' practices, teaching knowledge, and school practices related to active citizenship in a cross-national study. The first draft of the Active Citizen Compass (ACC) questionnaire in English was examined by an expert panel. The questionnaire was translated into Dutch and Greek, and tested for ambiguity, clarity, and user friendliness. Thereafter, the Dutch-Flemish and Greek versions were pilot tested on 54 teachers from Flanders and 63 teachers from Greece. Reliability and validity evidence indicates the ACC scales in Dutch and Greek are a reliable and valid measure of active citizenship in schools.

Razvoj in predhodna validacija vprašalnika o aktivnem državljanstvu: nizozemsko-flamska in grška različica

Namen študije je bil razviti vprašalnik za ocenjevanje učiteljevih praks, pedagoškega znanja in šolskih praks, povezanih z aktivnim državljanstvom, v meddržavni študiji. Prvi osnutek vprašalnika o aktivnem državljanstvu (angl. Active Citizen Compass – ACC) v angleščini je pregledala skupina strokovnjakov. Vprašalnik je bil preveden v nizozemščino in grščino ter preizkušen glede dvoumnosti, jasnosti in prijaznosti do uporabnika. Nato sta bili nizozemsko-flamska in grška različica pilotno testirani pri 54 učiteljih iz Flandrije in 63 učiteljih iz Grčije. Podatki o zanesljivosti in veljavnosti kažejo, da sta lestvici ACC v nizozemščini in grščini zanesljivo in veljavno merilo aktivnega državljanstva v šolah.

University of Maribor Press

Introduction

The contribution of schools and teachers to preparing students to deal effectively with the challenges in their lives, to be aware of their responsibilities as future citizens, and to participate actively in their own environment and society cannot be underestimated. In the European Union, the educational policies of the last two decades have set out as a basic priority for European education systems to prepare students to be responsible for tomorrow's societal life as important future stakeholders and get engaged in civic life by respecting the common European values (Chiou, 2025; Navarro-Medina, and de-Alba-Fernandez, 2015; Paesen et al., 2025; Reynolds et al., 2019; Saleminezhad et al., 2025; Veugelers, 2015). In the light of these policies, EU member states have proceeded to educational reforms to orient their national curricula toward the promotion of active citizenship in schools by adopting various approaches, such as the incorporation of an autonomous lesson on citizenship education, cross-curricular learning activities and projects, or/and learning material as part of various lessons (Eurydice, 2012). Despite the differentiation in national curricula with respect to the approaches adopted, which can be attributed to the diverse educational philosophy or ethnical and cultural diversity across Europe, literature review shows as a systematic commonality among the different curricula their priority to prepare students to be active citizens in a rapidly changing society. Thus, modern European curricula, aligned with the basic principles of European educational policies, target the development of students' competences to be ready to care about, take action in and reflect on issues affecting their lives at different levels (Kerr, 2002; Navarro-Medina and de-Alba-Fernandez, 2015). In other words, they prepare them for assuming active roles on a local, national, and international level.

Besides the school curricula, a wide range of educational and research projects, along with cross-national synergies between multiple educational and research institutions, have been supported financially by the European Commission to conduct research on the status of active citizenship in European education systems and to contribute to the design of teacher training and learning material on related issues. Among them, the Active Citizen Compass (n.d.) project, supported in 2023 by the Erasmus+ Programme in Key Action 2 (European Commission, 2023), aims to promote active citizenship in secondary education schools in six countries: Belgium (Flanders), Czechia, Greece, Spain, The Netherlands, and Turkey. It comprises a wide cooperation synergy among Higher Education Institutions and secondary education

V. Chiou & O. Holz: Development and Preliminary Validation of the Active Citizen Compass Questionnaire: The Dutch–Flemish and Greek Versions

119

schools from each partner country. Particularly, it aims to support Active Citizenship (AC) in secondary schools by promoting the design of school policies on active citizenship, and to prepare students to be active citizens through a variety of developmentally appropriate learning material and assessment activities.

For research purposes, a questionnaire capable of assessing the extent to which active citizenship is applied in school environments should be designed. The questionnaire should be developed to assess a. teachers' practices and specific teaching knowledge related to active citizenship, and b. schools' active citizenship policies. It would be used as the basic research instrument in a wider cross-national study implemented in secondary education schools in the six partner countries. The research will contribute to the needs analysis with regard to active citizenship in partner schools. Based on the needs analysis, the ACC partners will design and test learning materials related to active citizenship in schools and will contribute to the development of school policies oriented to active citizenship. This paper aims to present the development procedure and the preliminary validation of the Active Citizen Compass - ACC questionnaire in Dutch and Greek within the framework of the Active Citizen Compass project.

The study will address the following research questions:

1. To what extent do translation-related discrepancies affect the reliability and validity of the Dutch-Flemish version of the Active Citizen Compass (ACC) questionnaire?

2. To what extent do translation-related discrepancies affect the reliability and validity of the Greek version of the Active Citizen Compass (ACC) questionnaire?

Methods and Results

For the construction of a new questionnaire assessing the active citizenship status in schools, specific steps were followed to ensure the reliability and validity of the instrument. The procedure for the questionnaire's development went through three phases, as described in detail below.

Phase A: Pre-pilot phase

Step 1: Literature review and preparation of the questionnaire's scope and construct

Initially, meetings took place between all ACC partners to discuss the precise scope of the questionnaire along with the goal and the specific aims of the Active Citizen Compass project.

It was decided that the ACC questionnaire should be adequate to assess the extent to which active citizenship is applied in schools both in classrooms by teachers and within the school as a system. Thus, it should contain sufficient and appropriate items to measure the teachers' specific knowledge and teaching practices, and school policies related to this issue. Additionally, the first phase consisted of the literature review on the development process of a questionnaire and the active citizenship related research. A four-member team from the ACC project studied attentively literature on the development of questionnaires and the steps that should be followed to ensure the validation of the instrument. The same team studied literature reviews and existing questionnaires on active citizenship and active citizenship education. Relevant data and material were downloaded in a common shared place for all members to have equal access.

The four-member team, based on the scope of the questionnaire and related literature, decided its structure. More particularly, the questionnaire should have two main sections:

a. The first section includes questions related to sociodemographic and academic information of participants, as well as information about their school.
b. The second section should include two main scales. The first scale should focus on active citizenship in teachers' own classes and teaching, and the second scale should include questions about active citizenship at a school system level.

Step 2: Selection of the items of the ACC questionnaire (ACC in English)

In the second step of the development process, the four-member team, following the decisions of step 1, and based on the literature review and the aims of the ACC project, generated a pool of 63 items.

It was decided that the face, the content, and the construct validity should be checked for validation reasons. Face validity refers to how appropriate the items seem to experts and respondents (Krabbe, 2017), and although it may affect the validity of the instrument, it is not considered a very important aspect of it (Golijani-Moghaddam et. al., 2013). Content validity refers to "the ability of a test to represent the domain of tasks it is designed to measure" (Sireci, 1998, p. 104) and is considered essential evidence to support the validity of a measurement tool such as a questionnaire for research (Yusoff, 2019).

V. Chiou & O. Holz: Development and Preliminary Validation of the Active Citizen Compass Questionnaire: The Dutch–Flemish and Greek Versions

121

To ensure the face and content validity of the ACC questionnaire, the first draft of the questionnaire was sent to a panel of 15 experts from ACC partners to ensure that it was accurate, clear, easy to understand, free of bias, and related to the concept of active citizenship to be assessed. Following experts' suggestions, the first draft of the ACC questionnaire in English included 70 items. A second round of evaluation by experts took place, and the ACC questionnaire in English was pre-finalised with the following structure.

The first section included 8 closed-ended questions about teachers' socio-demographic information and 5 questions about their school. The second part of the ACC questionnaire included two 6-point Likert scales (0=strongly disagree to 6=strongly agree) and seven subscales as follows.

    A.   The scale "Active Citizenship in your own classes and teaching", which is divided into four subscales:

A1. Teaching pupils to participate in their own environment

A2. Teaching pupils to participate in society

A3. Teaching pupils to actively influence society

A4. Teaching specific knowledge related to active citizenship.

    B.   The scale "Active Citizenship at your school", which is separated into three subscales:

B1. Teaching pupils to participate in their own environment

B2. Teaching pupils to participate in society

B3. Teaching pupils to actively influence society.

Step 3: Translation and pre-pilot testing of the ACC questionnaire in Dutch and Greek

Soon after the ACC questionnaire in English was finalised, it was translated into Dutch and Greek by experts proficient in English and Dutch, and in English and Greek, forward and backwards for the cross-national study. The first draft of the Dutch-Flemish and the Greek version was checked for its user-friendliness, comprehensibility, or potential confusions by five Flemish and five Greek teachers of secondary education. Following their suggestions and comments, the ACC partners from the two countries finalised the draft of the ACC questionnaires in Dutch and Greek by correcting wording and converting four 6-likert items related to parent and student councils to trichotomous questions.

Phase B: Pilot testing of the ACC questionnaire in Dutch and Greek

The pilot testing phase lasted from April to May 2024. The Dutch-Flemish version of the questionnaire was distributed to secondary education schools in Flanders and the Greek version to Greek schools via email and social media. Teachers were informed about the purpose of the survey, and the confidentiality, and they were asked to voluntarily participate. No email addresses were required, while it was clarified that their anonymity would be ensured, and the data used exclusively for research purposes. In total, 54 teachers from Flanders (83.3% women and 16.7% men) and 63 teachers from Greece (76.2% women and 23.8% men) participated in this study voluntarily.

Reliability

Reliability refers to the consistency of the research results. In the development process of the ACC questionnaire, internal reliability was estimated. Internal consistency reflects the extent to which the items on the questionnaire are inter-correlated or whether they consistently measure the same construct and are estimated by coefficient alpha, commonly known as Cronbach alpha.

Table 1 shows the coefficient alphas for the ACC scales and subscales for the Flemish participants. Similarly, Table 2 presents the coefficient alphas for the ACC scales and subscales for the Greek participants. In sum, the reliability evidence indicates that ACC scales for both the Dutch-Flemish and Greek versions are a highly reliable measure of active citizenship.

Table 1

ACC Scales - Internal Consistency – Cronbach Alpha.

Flanders			
In your own classes and teaching Subscales	.954	At your school Subscales	.897
Teaching pupils to participate in their own environment	.915	Teaching pupils to participate in the own environment	.805
Teaching pupils to participate in society	.872	Teaching pupils to participate in society	.825
Teaching pupils to actively influence society	.862	Teaching pupils to actively influence society	.839
Teaching specific knowledge related to active citizenship	.920		

V. Chiou & O. Holz: Development and Preliminary Validation of the Active Citizen Compass Questionnaire: The Dutch–Flemish and Greek Versions

123

Table 2

ACC Scales - Internal Consistency – Cronbach Alpha.

Greece			
In your own classes and teaching	.952	At your school	.949
Subscales		Subscales	
Teaching pupils to participate in their own environment	.963	Teaching pupils to participate in their own environment	.902
Teaching pupils to participate in society	.882	Teaching pupils to participate in society	.914
Teaching pupils to actively influence society	.889	Teaching pupils to actively influence society	.903

Validity

The validity of a questionnaire refers to the extent that questionnaire measures what it has been designed to measure. In the pilot testing phase, two types of validity were estimated: content and the construct validity.

The content validity was evaluated by estimating the item-total score correlations. In this way, we checked how well individual items were aligned with the construct where they were placed. Salvia and Ysseldyke (2000) posited that items that do not correlate at least .25 to 30 with the total score, likely do not belong to the domain in which they have been placed.

Table 3 and Table 4 present the items - total correlations for the scales "Active Citizenship in your own classes and teaching" and "Active Citizenship at your school." Items 1, 4, and 16 of the Scale "Active Citizenship in your own classes and teaching" were correlated less than .25 for the Dutch-Flemish version. None of the items were correlated less than .487 for the Greek version of the ACC scale "Active Citizenship in your own classes and teaching".

In regard to the ACC Scale "Active Citizenship at your school", none of the items were correlated less than .382 for the Dutch-Flemish version. Similarly, all items of the same scale were correlated more than .529 for the Greek version.

Table 3

Scale "Active Citizenship in your own classes and teaching". Item –Total score correlations.

	Item-Total Correlation (r)	
	Flanders	Greece
1. I actively pay attention to a supportive atmosphere in the classroom.	.175	.665**
2. I actively encourage my pupils to show empathy.	.485**	.734**
3. I actively facilitate that everybody in the class feels comfortable.	.298*	.692**
4. I actively facilitate that everyone in the class participates.	.187	.678**
5. If there is a problem in the group, I support my pupils to find a solution themselves.	.339*	.732**
6. I encourage my pupils to make it up again in case of an argument.	.525**	.840**
7. I encourage my pupils to stand up for themselves without hurting others.	.504**	.587**
8. I actively pay attention to the prevention of bullying during my classes.	.536**	.733*
9. I actively pay attention to the prevention of online bullying during my classes.	.671**	.779**
10. I make sure my pupils don't take pictures or film each other without consent.	.347*	.618**
11. I encourage my pupils to think carefully before sharing their opinion on social media.	.682**	.753**
12. I encourage my pupils to respond respectfully on social media	.622**	.759**
13. I actively intervene and discuss the consequences of sharing nude photos (with and without consent).	.695**	.653**
14. I actively consider my pupils' and their parents' budget when deciding on schoolbooks or activities.	.406**	.703**
15. I discuss financial considerations with my pupils if needed.	.305*	.487**
16. I make sure my pupils collect their waste when we are on an excursion or outside the classroom.	.232	.677**
17. I encourage my pupils to keep the classroom clean.	.446**	.740**
18. I actively pay attention to the diversity in my classroom and integrate this into my didactic approach.	.724**	.758**
19. I actively pay attention to the diversity in my classroom and integrate this is into the content of my teaching.	.685**	.788**
20. I actively pay attention to the diversity in my classroom and adjust the content of my teaching to the needs of all pupils.	.553**	.706**
21. I practise shared decision making with my pupils and teach them its importance.	.561**	.731**
22. I encourage and integrate open conversations about the world during my classes.	.684**	.679**
23. I encourage and integrate open conversations about societal issues during my classes.	.727**	.762**
24. If students think differently, I show genuine interest in their opinion and let them express their opinion. I expect the same from the students.	.644**	.718**
25. I pay attention to or highlight other cultures during my classes regularly.	.652**	.620**
26. I pay attention to multilingualism in my classes regularly.	.414**	.581**
27. I integrate news media items in my classes regularly.	.643**	.653**

V. Chiou & O. Holz: Development and Preliminary Validation of the Active Citizen Compass Questionnaire: The
Dutch–Flemish and Greek Versions

125

28. I pay attention to environmental challenges and climate change in my classes regularly.	.497**	.771**
29. I pay attention to politics in my classes regularly.	.577**	.515*
30. I organize charity activities with my classes.	.439**	.626**
31. I encourage students to consider the influence of advertising when buying things.	.705**	.667**
32. I encourage my students to consider the circumstances in which products were made when buying things.	.655**	.765**
33. I encourage my students to consider buying second-hand.	.638**	.673**
34. I encourage my students to consider climate change when traveling (locally and abroad).	.487**	.780**
35. I encourage my pupils to consider climate change when choosing their food.	.581**	.763**
36. I encourage my pupils to stay informed on politics, both local and European or global.	.583**	.667**
37. I choose green travel options when planning excursions for my classes.	.307*	.599**
38. I teach about 'fake news'.	.588**	.673**
39. I teach about safe social media and cyber security.	.572**	.768**
40. I teach about climate change.	.549**	.688**
41. I teach about politics and democracy	.509**	.692**
42. I teach about the protection of the environment.	.575**	.823**
43. I teach about voluntarism.	.666**	.664**
44. I teach about social inclusion.	.774**	.756**
45. I teach about poverty.	.727**	.730**
46. I teach about fair trade	.641**	.640**

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

* Correlation is significant at the 0.05 level (2-tailed)

Table 4

Scale "Active Citizenship at your school". Item –Total score correlations.

	Item-Total Correlation (r)	
	Flanders	Greece
54. Our school (or the government) has a plan to facilitate payment of school costs for families with budget issues.	.577**	.668*
55. Our school gives pupils an active voice in decisions on rules and regulations.	.561**	.529**
56. Our school gives pupils an active voice in decisions on activities and on the learning plan.	.540**	.794**
57. Our school encourages pupils to propose activities or changes to create a better school environment.	.550**	.728**
58. Our school works together with the local community to create a safe traffic situation around school.	.503**	.754**
59. Our school works together with the local community to know what the community considers important.	.660**	.765**
60. Our school encourages coming to school by bike, on foot, or by public transportation.	.489**	.672**
61. Our school pays attention to events from different cultures or religions.	.624**	.703**

62. Our school has a policy on actively promoting or engaging with multilingualism.	.597**	.765**
63. Our school provides access to (digital) newspapers at school.	.446**	.657**
64. Our school encourages consumption of locally produced or sustainable food in the school context.	.662**	.756**
65. Our school organizes charity activities with others on a regular basis.	.382**	.710**
66. Our school gives pupils an active voice in decisions on charity activities on a regular basis.	.612**	.838**
67. Our school encourages pupils to take initiative to organize charity events on a regular basis.	.456**	.830**
68. Our school allows pupils to participate in demonstrations that support a good cause on a regular basis.	.439**	.603**
69. Our school encourages pupils to participate in demonstrations that support a good cause on a regular basis.	.448**	.648**
70. Our school allows pupils to participate in human rights actions on a regular basis.	.602**	.614**
71. Our school encourages pupils to participate in human rights actions on a regular basis.	.650**	.695**

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

* Correlation is significant at the 0.05 level (2-tailed)

We also evaluated construct validity by estimating the internal structure validity (Chiou, 2016; Merrell, 2002). Evidence was obtained by estimating the relationships among the total score of scales and the total score of their subscales and computing bivariate Pearson. Table 5 presents the intercorrelations among total scores of scale 1 and its subscales, and Table 6 presents the intercorrelations among total scores of scale 2 and its subscales. All correlations were found positive at a statistically significant degree and higher than .25, apart from the correlation between subscale 1 and 2 of the scale "Active Citizenship at your school," which was estimated at .225, approximating .25.

Table 5
Intercorrelations among total scores of scale A and its subscales.

Flanders					Greece			
	A1	A2.	A3	A4	A1	A2	A3	A4
A1.								
A2.	.484**				.755**			
A3.	.506**	.606**			.703**	.766**		
A4.	.359**	.778**	.693**		.705**	.755**	.808**	
Scale A Total	.810**	.813**	.823**	.806**	.921**	.882**	.887**	.893**

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

V. Chiou & O. Holz: Development and Preliminary Validation of the Active Citizen Compass Questionnaire: The Dutch–Flemish and Greek Versions

127

Table 6

Intercorrelations among total scores of scales 2 and its subscales.

Flanders				Greece		
	B1	B2	B3	B1	B2	B3
B1						
B1	.638**			.680**		
B1	.225	.465**		.732**	.763**	
Scale B - Total	.763**	.898**	.715**	.866**	.936**	.899**

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

Phase C: Finalisation of the ACC questionnaire in Dutch and Greek.

Following the pilot testing and the results about its psychometric characteristics, the ACC questionnaire was finalised without further alteration. Thus, the final version in Dutch and Greek has the following structure: the first section includes 8 close-ended questions about teachers' socio-demographic and academic information and 5 questions about their school. The second part of the ACC questionnaire includes two 6-point Likert scales with 71 total items (0=strongly disagree to 6=strongly agree), and four trichotomous questions. The scales and their subscales are presented briefly as follows:

    A) The scale "Active Citizenship in your own classes and teaching", which is separate into four subscales:

A1. Teaching pupils to participate in their own environment (21 items)

A2. Teaching pupils to participate in society (8 items)

A3. Teaching pupils to actively influence society (8 items)

A4. Teaching specific knowledge related to active citizenship (9 items)

    B) The scale "Active Citizenship at your school", which is separated into three subscales:

B1. Teaching pupils to participate in the own environment (8 items)

B2. Teaching pupils to participate in society (10 items)

B3. Teaching pupils to actively influence society (7 items).

Conclusion

The ACC questionnaire in Dutch and Greek was designed to assess teachers' practices and specific teaching knowledge related to active citizenship as well as their schools' relevant policies. Both versions of the questionnaire demonstrated high internal reliability for the two main scales and their subscales.

The development procedure and the results analysis indicate that overall, the Dutch-Flemish and Greek ACC questionnaires have satisfactory face, content, and internal construct validity. In the Dutch-Flemish version, three items in scale 1 were correlated less than .25 and two subscales of scale 2 intercorrelated at .225, approximating .25, a result which can potentially be attributed to translation issues. We suggest that both questionnaires can be used without significant concerns for investigating active citizenship status in secondary education schools in Flanders and Greece. Nonetheless, further investigation in the cross-national research will provide us with additional evidence about the behaviour of these three items. In our opinion, the questionnaires can also be used in primary education without significant concerns, considering that the items are focused on exploring teachers' knowledge and practices as well as their schools' policies relevant to active citizenship without making direct reference to secondary education. Based on the focus of future research, the two scales could also be used separately.

References

Active Citizen Compass. https://activecitizencompass.eu/

Chiou, V. (2025). Active citizenship in Greek lower secondary education curricula. In O. Holz, K. D'Herdt, and D. Sampermans (Eds.), *Active Citizenship Education for a Better Tomorrow. History, challenges, perspectives across Europe* (pp. 105–123). Waxmann.

Chiou, V. (2016). *The promotion of mental health among preschoolers aged 4-6 years old: The implementation of I Can Problem Solve Program in Greek kindergarten schools*. Unpublished doctoral thesis. University of the Aegean, Rhodes, Greece. (in Greek)

Golijani-Moghaddam, N., Hart, A., and Dawson, D. L. (2013). The implicit relational assessment procedure: emerging reliability and validity data. *Journal of Contextual Behavioral Science*, *2*(3–4), 105–119. https://doi.org/10.1016/j.jcbs.2013.05.002

European Commission (2023). *Erasmus+ Programme Guide*. https://erasmus-plus.ec.europa.eu/si–tes/default/files/2023-11/2024-Erasmus%2BProgramme-Guide_EN.pdf

Eurydice (2012). *Citizenship Education in Europe*. Education, Audiovisual and Culture Executive Agency. https://eurydice.eacea.ec.europa.eu/publications/citizenship-education-europe

Kerr, D. (2002). Citizenship education: an international comparison across sixteen countries. *International Journal of Social Education*, *17*(1), 1–15. https://dialnet.unirioja.es/servl–et/articulo?codigo=256772

Krabbe, P. (2016). *The measurement of health and health status: concepts, methods and applications from a multidisciplinary perspective*. http://libportal.umsha.ac.ir/site/catalogue/57170

Merrell, K. W. (2002). *PKBS-2. Preschool and Kindergarten Behavior Scales* (2nd ed.). Pro.ed.

Navarro-Medina, E., and De-Alba-Fernandez, N. (2015). Citizenship education in the European curricula. *Procedia: Social & Behavioral Sciences*, *197*, 45–49. https://doi.org/10.1016–/j.sbspro.2015.07.381

Paesen, D., Holz, O., and D'Herdt, K. (2025). Active citizenship education in Flanders. The situation anno 2024. In O. Holz, K. D'Herdt, and D. Sampermans (Eds.), *Active Citizenship Education for a Better Tomorrow. History, challenges, perspectives across Europe* (pp. 53–70). Waxmann.

V. Chiou & O. Holz: Development and Preliminary Validation of the Active Citizen Compass Questionnaire: The Dutch–Flemish and Greek Versions

129

Reynolds, R., Macqueen, S., & Ferguson-Patrick, K. (2019). Active citizenship in a global world: opportunities in the Australian curriculum. *Curriculum Perspectives, 40*(1), 63–73. https://doi–.org/10.1007/s41297-019-00084-2

Saleminezhad, B., Holz, O., and D'Herdt, K. (2025). Active citizenship education in Europe. In O. Holz, K. D'Herdt, & D. Sampermans (Eds.), *Active Citizenship Education for a better tomorrow. History, challenges, perspectives across Europe* (pp. 39-52). Waxmann.

Salvia, J., and Ysseldyke, J. E. (2000). *Assessment* (8th ed.). Houghton Mifflin.

Sireci, S. G. (1998). The construct of content validity. *The Social Indicators Research, 45*, 83–117. https://link.springer.com/article/10.1023/A:1006985528729

Veugelers, W. (2015). Citizenship education and active student participation: the Netherlands. In *Springer eBooks* (pp. 103–116). https://doi.org/10.1007/978-94-017-9729-0_7

Yusoff, M. S. B. (2019). ABC of content validation and content validity index calculation. *Education in Medicine Journal, 11*(2), 49–54. https://doi.org/10.21315/eimj2019.11.2.6

Acknowledgements

Authors:

Vana Chiou, PhD

Laboratory teaching staff, University of the Aegean, Department of Geography, University Hill, 81132 Mytilene, Greece, e-mail: b.xiou@aegean.gr

Laboratorijska učiteljica, Univerza v Egejskem morju, Oddelek za geografijo, University Hill, 81132 Mitilene, Grčija, e-pošta: b.xiou@aegean.gr

Oliver Holz, PhD

Associate Professor, KU Leuven, Faculty of Economics and Business, Warmoesberg 26, 1000 Brussels, Belgium. oliver.holz@kuleuven.be

Izredni profesor, KU Leuven, Fakulteta za ekonomijo in poslovne vede, Warmoesberg 26, 1000 Bruselj, Belgija. oliver.holz@kuleuven.be

AWARENESS OF STAKEHOLDERS ABOUT INCLUSIVE EDUCATION

SANDEEP BERWAL & VARUNA TEHLAN DAHIYA

Chaudhary Ranbir Singh University, Faculty of Education, Haryana, India
Bhagat Phool Singh Women's University, Faculty of Education, Haryana, India

CORRESPONDING AUTHOR/KORESPONDENČNI AVTOR/
berwal_suhani@yahoo.com

Abstract/Izvleček
This paper examines the level of awareness among stakeholders about inclusive education. The sample comprises thirty school heads, 108 class teachers, forty-four parents, and twenty-eight School Management Committee members. A thirty-item self-constructed awareness questionnaire was administered for data collection, and the data was analysed using descriptive statistics. Findings indicate that stakeholders are highly aware of inclusive education and that parents are the most aware among all categories of stakeholders. In terms of gender, female stakeholders proved to be more aware than their male counterparts. An influence of educational qualifications on awareness level is visible since stakeholders with a higher level of education demonstrated higher levels of awareness.

Ozaveščenost déležnikov o inkluzivnem izobraževanju

V prispevku preučujemo stopnjo ozaveščenosti déležnikov o inkluzivnem izobraževanju. Vzorec obsega 30 ravnateljev šol, 108 razrednikov, 44 staršev in 28 članov vodstvenih komisij šol. Za zbiranje podatkov smo uporabili vprašalnik o ozaveščenosti s tridesetimi točkami. Podatki so analizirani z uporabo deskriptivne statistike. Ugotovitve kažejo, da so déležniki visoko ozaveščeni o inkluzivnem izobraževanju, kjer so med vsemi kategorijami déležnikov najbolj ozaveščeni starši. Kar zadeva spol, ugotovljamo, da so ženske bolj ozaveščene kot moški. Vpliv izobrazbene kvalifikacije na stopnjo ozaveščenosti je viden, saj so déležniki z višjo stopnjo izobrazbe izkazali višjo ozaveščenost.

University of Maribor Press

Introduction

Inclusive education is a relatively new concept in India and one that is gaining popularity daily. At the school level, it involves an initiative to educate students with disabilities alongside non-disabled peers in the same physical, social, emotional, and educational environments, with requisite support services in the form of special teachers and special equipment, while at the same time adapting the school infrastructure to meet the unique needs of all students.The message of inclusive education is clear: accept classroom diversity as a strength. It aims to achieve equity, equality, and social justice in all domains of schooling. It values, accepts, and understands the differences among students in terms of abilities and talents. In inclusive schools students with and without disabilities sit and work together, making inclusive education a practice beyond physical proximity. Rather, it is a practice of respecting and enjoying diversity where the system of teaching and learning is adapted to meet the learning needs of all students. Inclusive education believes that the school head-teacher is a leader and not merely an administrator. It treats class teachers, parents, and other stakeholders as important agents of school change. A positive attitude among all stakeholders is critical to the success of inclusive education at all stages of the educational ladder.

Many research studies have confirmed that knowledge is a key factor in determining a person's attitude (Yadav, 2002). Research has also revealed that ignorance leads to misconceptions, and these further lead to unrealistic attitudes (Berwal, 2008). It is commonly believed that merely placing students with disabilities into inclusive settings does not guarantee their successful social and academic progress; however, a positive attitude among stakeholders can ensure their success. The positive attitude further depends on an individual's knowledge base (Berwal, 2008).

Many researchers have investigated people's feelings about the disabled and their knowledge about disability and inclusive education (WHO, 2011; McLennon, 2012). A proficient level of awareness and knowledge is considered essential to deliver satisfactory educational services and public life to students with disabilities.

Williamson (2014) has found that many students in inclusive schools are not educated about disabilities. This constrains their understanding and acceptance of, and empathy for their peers with disabilities. Morin, Rivard, Crocker, Boursier, and Caron (2012) and Lindsay, and McPherson (2011) have stressed that generating awareness about disability and inclusion is extremely important because it moulds

the attitudes of stakeholders in a more positive way toward services for students with disabilities. Researchers have found ignorance to be the main factor in the retention of negative attitudes towards students with disabilities (Sharp et al., 2010). When stakeholders feel well-informed about differences, disability, and inclusion, they are likely to develop a more positive attitude towards learners with diverse needs. Pandey (1991) has observed that persons with disabilities are unwelcome in public places and social functions in rural communities. Punani (2000) has argued that a low level of awareness among the general population is one of the greatest impediments to the promotion of inclusive education. An NCERT (n.d) document advocates generating disability awareness in schools to help teachers to establish an atmosphere of acceptance and to plan activities that promote inclusion. Lack of awareness among parents about the educational provisions and benefits of inclusion has been cited as one of the reasons that restrict students with disabilities from attending inclusive schools. Kuppusamy, Narayan, and Nair (2012) have found that owing to moderate awareness about legislation among family members of students with disabilities, students are staying away from inclusive schools. Behera, and Gowramma (2016) have stated that despite enrolment, students with disabilities are not going to Anganwadi Centres (AWC) because of a lack of awareness in the community. However, evidence by Singal (2006) and Jha (2002), cited in Gowramma, Gangme, and Behera (2018), suggests that awareness about inclusive education is not a guarantee of successful inclusive practices. Edwardraj et al. (2010) have highlighted that public awareness, education, and community-level interventions are essential to minimize the effects of the myths and misconceptions attached to disability.

In this paper, an attempt has been made to examine the existing level of awareness among head teachers, class teachers, parents, and members of the School Management Committees (hereinafter referred to as SMCs) towards the education of students with disabilities in inclusive settings, so that suggestions for producing effective changes in their knowledge base are made to ensure effective and efficient implementation of inclusive education in the Haryana State of India.

Objective
The study is planned to gain an understanding of the level of awareness among stakeholders – i.e. head teachers, class teachers, parents, and members of the School

Management Committees (SMCs) – towards the education of students with disabilities in inclusive schools.

Sample

The sample comprises thirty head teachers, 108 class teachers, forty-four parents, and twenty-eight SMCs members randomly chosen from eighty-four inclusive schools within four districts of Haryana State.

Research Method

The descriptive survey method has been used.

Instrument for data collection

A self-developed 'awareness about disability' questionnaire was used to collect the data. The questionnaire has thirty items. It was validated for content and face value.

Scoring and Analysis of the Data

The respondents were required to indicate either 'yes' or 'no' to each item on the questionnaire. In some questions, 'yes' was scored, while in some, 'no' was scored. One mark was given for each correct answer and zero for each wrong answer. So, the highest obtainable score on the questionnaire could be thirty, and the lowest could be zero. The data was analysed using descriptive statistics. The awareness level among stakeholders was assessed using extreme group analysis. In adopting extreme group analysis, the Q1 and Q3 limits have been considered: i.e., those scoring Q1 and below are treated as having low awareness levels and those scoring Q3 and above are considered to exhibit high levels of awareness.

Findings

A demographic profile of all stakeholders according to their role position, gender, age, and educational level was prepared so as to have a glimpse of their background and its expected influence on their awareness about inclusive education. Table 1 presents the demographic profile of all stakeholders.

Table 1
Demographic Profile of the Stakeholders (N=210).

Sr. No.	Stakeholders	Number	Percentage
	Role Position		
	School Management Committee (SMC) Member	28	13.33
1	Class Teacher	108	51.43
	Head Teacher	30	14.29
	Parents	44	20.95
	Total	210	100
	Gender		
2	Male	125	59.52
	Female	85	40.48
	Age		
	18-30 Years	21	10.00
3	31-45 Years	106	50.48
	46-58 Years	77	36.67
	58-Above	6	02.85
	Level of Education		
	Illiterate	5	02.39
	Primary	18	08.57
4	Matric	18	08.57
	10+2	21	10.00
	Graduation	57	27.14
	Post-Graduate & above	91	43.33

Table 1 indicates that in total 210 stakeholders participated in the study and responded to the awareness questionnaire. Out of those 210 stakeholders, 28 (13.33%) are SMC members, 108 (51.43%) class teachers, 30 (14.29%) head teachers, and 44 (20.95%) are parents of students with disabilities. In terms of gender, 125 (59.52%) stakeholders are male and 85 (40.48%) female. The age for teachers and head teachers ranges from 18 to 58 years, while it exceeded 58 years for parents and SMC members. Twenty-one (10%) stakeholders belong to the age brackets of 18 to 30 years, whereas 106 (50.48%) belong to the age group of 30 to 45 years. A substantial number (n=77, 36.67%) of the stakeholders are between 45-58 years of age, while a small proportion (n= 6, 2.85%) is above 58 years. The educational levels of the participants vary from being illiterate to post-graduation and above.

In particular, 5 (2.39%) are illiterate, while 18 (8.57%) have primary education, 18 (8.57%) have Matric Pass *(Matric Pass: This term refers to individuals who have passed the Secondary School Certificate (SSC) examination, which includes education from grades 1 to 10)*, 21 (10%) are ten-plus-two (*Ten-Plus-Two: This term indicates the additional two years of education after Matric typically completed in higher secondary school, covering grades 11 and 12*), 57 (27.14%) are graduates, and 91 (43.33%) have qualifications that are post-graduate and above.

Teachers Awareness of Inclusive Education

Class teachers are important stakeholders in inclusive education. The success or failure of inclusive education largely depends on the attitudes, skills, and awareness of teachers. Table 2 depicts the mean scores of teachers on the 'Awareness about Inclusive Education' questionnaire.

Table 2
Mean Scores of Teachers on 'Awareness about Inclusive Education' Questionnaire.

Sr. No.	Stakeholders	Number	Percentage	Mean Score
1	**Role Position**			
	Class Teacher	108	51.43	20.38
2	**Gender**			
	Male	64	59.26	20.37
	Female	44	40.74	20.40
3	**Age**			
	18-30 Years	12	11.11	21.08
	31-45 Years	59	54.62	20.91
	46-58 Years	37	34.25	19.37
4	**Level of Education**			
	10+2	7	6.48	17.42
	Graduation	37	34.26	20.29
	Post-Graduate & above	64	59.26	20.81

Table 2 indicates that the overall mean score for this group (N=108) is 20.38, which means that the awareness level of teachers about inclusive education is 'high'. The mean of the scores for female teachers (n=44, m=20.40) is slightly higher than that of male teachers (n=64, m=20.37). The age of class teachers varies from 18 to 58 years. The younger class teachers (age 18-30 years) have a higher mean score (n=12, m=21.08) than those whose ages fall between 31 and 45 years (n=59, m=20.91). The group of teachers with the lowest mean score (n=37, m=19.37) is older than 45 years. The teachers who have the lowest mean score (n=07, m=17.42) among all sub-categories, having education up to 10+2.

It is evident from Table 2 that female teachers are more aware than their male counterparts. Similarly, the influence of age and higher education is visible on the levels of awareness since young teachers have a higher mean score than older colleagues, and teachers holding qualifications that are post-graduate and above prove to be more aware than their counterparts with lower qualifications.

These findings are slightly contrary to Dapudong (2014), who found that teachers had only moderate knowledge of inclusive education in Thailand.These findings are also contrary to those of Myreddi and Narayan (2000), Sharma and Deppeler (2005), and Sharma (2018), who observed that most school teachers in India have inadequate awareness of inclusion and classroom diversity but present findings support the results of Reddy and Sujathamalini (2005), Bala (2008), Pandey (2009), Johansson (2014), and Gowramma, Gangmei, and Behera (2018). The results of this study are not surprising because the Ministry of Human Resource Development (MHRD), the government of India (2015) claims that nearly 3 million teachers have received 2 to 3 days of in-service training on inclusive education, and 42% of teachers have been provided with 3 to 5 days of additional training with the support of special schools and other organizations. Every year the government of Haryana also provides in-service training over 3-5 days to general teachers on inclusive education. The younger teachers had higher scores on awareness than middle-aged and older teachers. This difference might be because the young ones have recently graduated from Education Colleges with some knowledge of special/inclusive education, while the older ones missed this aspect. Moreover, after the implementation of the Right to Education Act in 2010, passing a Teachers Eligibility Test (TET) has become a necessity in Haryana for getting a job in government schools, and the syllabus of the Haryana Teachers Eligibility Test (HTET) covers many topics on inclusive and special education. It invariably makes all those who have successfully passed HTET somewhat aware of emerging issues in the education of students with disabilities.

Moreover, this finding suggests that the next generation of teachers, owing to their greater awareness, may prove a major facilitator of and asset in inclusive education. The awakened and concerned teachers can minimize the tendency of children with disabilities to stay away from schools.

The highly qualified teachers were slightly more aware than their counterparts, which supports the findings of Sharda and Ranjan (2011), who find educational qualifications to be a significant factor in creating a difference in awareness level among teachers.

The importance of teacher education programmes in raising awareness among prospective teachers about inclusive education has been highlighted by many researchers. Cardona (2009) has suggested raising the level of awareness among pre-service teachers regarding disability issues. This is in line with the findings of Guðjónsdóttir et al. (2008), who urged change in the narrow view of inclusive education practices and using a holistic approach to address classroom diversity. A well-designed teacher education programme with inbuilt exposure to and experience of inclusion has been considered important by Sharma, Forlin, Deppeler, and Yang (2013), and Forlin, Kawai, and Higuchi (2014). It has been noted that such interactions lead to increased awareness among teachers about the needs and viewpoints of diverse learners.

Head-Teachers Awareness of Inclusive Education

Head teachers were another category of stakeholders who were assessed for awareness of inclusive education. It has been established that if head teachers are aware and knowledgeable about new concepts and policies on school education then it is easier to implement these successfully. Table 3 shows the mean scores of the group of head teachers on the 'Awareness about Inclusive Education' Questionnaire. It is evident from Table 3 that among the thirty head teachers who responded to the questionnaire, results indicate that they have a 'high' level of awareness. Most of these participants are male ($n = 17$, 56.67%), with fewer females ($n = 13$, 43.33%). The mean awareness score of male heads is greater than that of their female counterparts. The age of head-teachers ranges from 30 to 58 years, and the mean score for younger head-teachers (n=14, m=20.78) is marginally greater than older head teachers (n=16, m=20.25). A sizeable percentage of head-teachers (n=25, 83.33%) hold qualifications equal to post-graduate and above, while a few of them are only graduates (n=5, 16.67%).

Less qualified heads (n=5, m=20.60) have marginally better awareness than their more qualified counterparts (n=25, m=20.48).

School leadership is a crucial element in gearing the education system towards inclusive values (Ainscow, and Sandill, 2010); thus, it is important to generate awareness among school heads about the needs of children with disabilities. The slightly elevated level of awareness among school heads contradicts Banerjee's claim (2018) that "SSA's training provisions have suffered from poor outreach."

Table 3
Mean Scores of Head-Teachers on 'Awareness about Inclusive Education' Questionnaire.

Sr. No.	Stakeholders	Number	Percentage	Mean Score
1	**Role Position**			
	Head Teacher	30	14.29	20.44
2	**Gender**			
	Male	17	56.67	20.94
	Female	13	43.33	19.92
3	**Age**			
	18-30 Years	00	00	00
	31-45 Years	14	46.67	20.78
	46-58 Years	16	53.33	20.25
4	**Level of Education**			
	10+2	00	00	00
	Graduation	05	16.67	20.6
	Post-Graduate & above	25	83.33	20.48

School Management Committee (SMC) members' Awareness about Inclusive Education

The Right to Education Act (RTE) came into force with effect from April 1, 2010. Section 4 of the RTE Act stipulates that SMC is constituted in every school for better coordination of teaching-learning resources and to ensure community participation.

The SMCs are responsible for ensuring that all basic requirements for children with disabilities are met as per the Right to Education Act, 2010. Table 4 provides the mean scores of SMC members on the 'Awareness about Inclusive Education' questionnaire.

Table 4 shows that the overall awareness among 28 SMC members falls in the category of 'moderate' awareness. This group of SMC members consists of more males (n=20, 71.43%) than females (n=8, 28.57%). The male respondents reported a higher level of awareness than females. The age of this group ranges from eighteen to above 60 years. The younger members show considerably greater awareness than older members.

Table 4
Scores of SMC Members on 'Awareness about Inclusive Education' Questionnaire.

Sr. No.	Stakeholders	Number	Percentage	Mean Score
1	**Role Position**			
	SMC Member	28	13.33	19.78
2	**Gender**			
	Male	20	71.43	20.05
	Female	08	28.57	19.12
3	**Age**			
	18-30 Years	01	3.57	20
	31-45 Years	12	42.86	20.41
	46-58 Years	12	42.86	19.17
	Above 58 Years	03	10.71	19
4	**Level of Education**			
	Illiterate	01	3.57	17
	Primary	10	35.71	18.5
	Matric	06	21.42	19.33
	10+2	06	21.42	22.33
	Graduation	05	17.86	20.4
	Post-Graduate & above	00	---	---

Education is also found to have an impact on the awareness level. It is clear that secondary school educated (n=06, 21.42%) members have greater awareness than illiterate (n=01, 3.57%) and primary pass (n=10, 35.71%) respondents. Interestingly, compared to secondary educated (n=06, 21.42%) respondents, graduates (n=05, 17.86%) also prove to be less aware. None of the SMC members has a postgraduate degree.

It has been emphasized that poor awareness of disability and inclusion is one of the main obstacles to making SMCs and schools inclusive.The UNESCO (2019) report revealed that there was poor awareness among members of SMCs on the provisions of the RTE Act and the Rights of Persons with Disability Act.Therefore, proper training of SMC members on their roles and responsibilities in planning, monitoring, and supervision of inclusive education is critical. Such training will be more effective if it is conducted at the village or school level instead of at the block or cluster level.

Parental Awareness of Inclusive Education

Inclusive education works on the principle of collaboration between the school management, special teachers, general teachers, parents, and the community. This collaboration is upset when any partner becomes indifferent or loses interest in the process because of ignorance, myths, or misconceptions.

Since parents are the main stakeholders and collaborators in inclusion, it is vital for them to be sensitized, aware, and knowledgeable to take care of the interests of their wards with disabilities. Table 5 provides the mean scores of parents on the 'Awareness about Inclusive Education' questionnaire.

Table 5 shows the overall mean scores of forty-four parents on the 'Awareness about Inclusive Education' questionnaire as well as their respective mean scores in three subcategories. In aggregate, parents possess a 'high' level of awareness about inclusive education, with mothers (n= 20, m= 21.40) proving to be more aware than fathers (n= 24, m= 19.70). Parents within the age range of 60 to 58 years possess the highest awareness scores in the group, with those over 58 being the least aware. With regard to educational qualifications, parents possessing a graduate degree are the most aware of all.

Table 5
Scores of Parents on 'Awareness about Inclusive Education' Questionnaire.

Sr. No.	Stakeholders	Number	Percentage	Mean Score
1	**Role Position**			
	Parents	44	20.95	20.47
2	**Gender**			
	Male	24	54.55	19.70
	Female	20	45.45	21.40
3	**Age**			
	18-30 Years	08	18.18	21.50
	31-45 Years	21	47.73	19.71
	46-58 Years	12	27.27	21.83
	Above 58 Years	03	6.82	18.33
4	**Level of Education**			
	Illiterate	04	9.10	19.75
	Primary	08	18.18	18.87
	Matric	12	27.27	19.58
	10+2	08	18.18	21.25
	Graduation	10	22.72	22.30
	Post-Graduate & above	02	4.55	21.50

Recent research in the Indian context by the World Bank (2018) suggests that awareness among parents about educating their children with disabilities is growing. Despite being poor and illiterate, parents are making important decisions to educate their disabled offspring (Singal, and Muthukrishna, 2014). Similar findings have been reported in the World Bank study for rural India (Singal, 2013).

The findings indicate that the awareness programme for parents, peers, and the community is yielding fruitful results.

Overall and category-wise Awareness of Stakeholders about Inclusive Education

Table 6 summarizes the overall and category-wise mean scores of 210 stakeholders on the 'Awareness about Inclusive Education' questionnaire.

Table 6
Overall and Category-Wise Mean Scores of Stakeholders (N=210) on 'Awareness about Inclusive Education' Questionnaire.

Sr. No.	Stakeholders	Number	Percentage	Mean Score
	Role Position			
	School Management Committee (SMC) Member	28	13.33	19.38
1.	Class Teacher	108	51.43	20.38
	Head Teacher	30	14.29	20.44
	Parents	44	20.95	20.47
	Overall	210	100	20.27
	Gender			
2	Male	125	59.52	20.24
	Female	85	40.48	20.27
	Age			
	18-30 Years	21	10.00	20.86
3	31-45 Years	106	50.48	20.45
	46-58 Years	77	36.67	20.15
	58-Above	6	02.85	18.66
	Level of Education			
	Illiterate	5	02.39	18.38
	Primary	18	08.57	18.67
	Matric	18	08.57	19.45
4	10+2	21	10.00	20.33
	Graduation	57	27.14	20.90
	Post-Graduate & above	91	43.33	20.95

Table 6 presents overall response data to a 30-item questionnaire designed to identify the respondent's awareness as needed to support and promote inclusive education. The mean scores for different groups of respondents lie between 19.38 and 20.47, which indicates that separate groups of stakeholders are borderline cases, falling between moderate awareness and slightly 'high' awareness. Although a difference in mean scores was found between groups, yet the size of the mean differences is small enough to suggest little practical significance. Collectively, though, the higher mean scores for parents represent greater awareness of inclusive education.

The overall mean score for all stakeholders (N=210, M= 20.27) represents a 'high' level of awareness among them.

Compared to teachers (m=20.38), head teachers (m=20.44), and SMC members (m=19.38), and parents have a higher mean score (m= 20.47). This suggests that when compared to other groups of stakeholders, parents have a greater sense of efficacy when it comes to awareness about the concept, policies, and practices of inclusive education. This is especially important when we see that a greater percentage of stakeholders (43.33%), compared to parents, possess a master's degree. Given the organization of periodic counselling and awareness camps for parents and the holding of meetings of the Parent Teacher Association, these findings are not surprising and unexpected.

The average mean score of SMC members is markedly lower than those of other stakeholders. SMC members mean score indicates that they are less aware/informed/confident of their practical understanding of the provisions of inclusive education, in addition to the fact that they do not participate as much as parents in meetings and camps aimed at generating awareness. These findings indicate that more effort should be put into helping SMC members produce a good understanding of philosophy, concepts, and provisions. This can be achieved through periodic training, possibly in conjunction with State Council of Education Research and Training (SCERT) and Panchayati Raj Institutions. If trained properly, the SMC with the help of other stakeholders can plan extensive community mobilisation activities to overcome the various barriers to inclusive education.

It is pertinent to mention that community awareness is an agenda in the annual enrolment drives of schools, as stipulated under the RTE Act. It *interalia* includes *kala-jathas (Art groups)*, advocacy meetings, *nukkad nataks (street plays)* / sports tournaments, etc. Inclusive education is an essential component of the annual training of community leaders in every village and parental counselling camp. Moreover, parental counselling/ training as part of Home-Based Education, the celebration of the International day for Persons with Disabilities, etc. might have contributed to basic awareness among stakeholders, i.e. parents and teachers.

In the case of teachers, the mean scores indicate that although this group has the upper hand in comparison to the group of SMC members, their level of awareness is not encouraging. Teacher training programmes may need to be strengthened to make teachers adequately aware of how to work with students with diverse needs and abilities. Additionally, the school system needs to ensure that teachers attend all such meetings that are specifically called for fostering inclusion as

mandated under the Sarva Shiksha Abhiyan (SSA) *(Sarva Shiksha Abhiyan (Education for All Campaign) is a programme launched by the Indian Government aimed at providing universal elementary education for children aged 6 to 14)* and RTE Act.

Data collected from the group of head teachers suggest that they do not have the level of awareness one might expect. Given the information provided by thirty respondents, the findings reflect structural limitations of the school system and insufficient academic/administrative backup. Thus, it is vital to provide them with opportunities to increase their knowledge base through short-term courses and to share information with other stakeholders.

In terms of gender, the female stakeholders (m=20.27) are more aware than their male (m=20.24) counterparts. This might be because females are more concerned about and associated with the education of their children, regularly attend SMC and PTA meetings, and participate in annual parent counselling and awareness camps.

Although most of the stakeholders are postgraduate, a marginal number of them are graduates and have a qualification of 10+2, matric, and primary. Some stakeholders are even illiterate. The number of matric and the primary pass individuals is equal. The influence of educational level on the awareness of stakeholders is visible since there are consistently lower mean scores towards the lower levels of education. Within the group, the mean score on awareness of the respondents ranged from 18.38 to 20.95. In particular, illiterate respondents have a mean score of 18.38, the primary school educated 18.67, Matric pass 19.45, ten plus two 20.33, graduates 20.90, and respondents with postgraduate qualifications and above 20.95. The mean scores reveal that there is better awareness among stakeholders having a postgraduate degree. This means when stakeholders had a higher level of education, they showed greater awareness about inclusive education.

Conclusion

Collectively, the stakeholders hold a 'high' level of awareness about inclusive education although the size of the mean differences between 'moderate' and 'high' levels is marginal and practically insignificant. The study recommends generating greater insight among authorities by organising workshops, seminars, field visits, lectures, exhibitions, camps, dramas, talks, conferences, plays, and other capacity-

building programmes dealing with inclusive education and inviting and motivating the category of those stakeholders who have a moderate level of awareness or who are keen to further strengthen their knowledge base to better serve this unique category of students.

References

Ainscow, M. and Sandill, A. (2010). Developing inclusive education systems: The role of organisational cultures and leadership. *International Journal of Inclusive Education, 14*(4), 401–416.

Bala, R. (2008). Effects of an intervention programme on awareness levels of high school students and teachers in inclusive settings. Unpublished M. Phil.Thesis, Alagappa University, Karaikudi.

Banerjee, R. (2018). Meeting the human resource challenges for inclusion of children with disabilities in schools: A critical review of policies and practices on teachers and other key education personnel with case studies. (unpublished report). UNESCO, New Delhi.

Beniwal, A. (2014). *Children with dyslexia: An analytical study of classroom practices.* Delhi University, New Delhi.

Behera, L., and Gowramma, I.P. (2016). School readiness of children from ST community in Odisha: An in-depth analysis. Unpublished NCERT research report. RIE, Bhubaneswar.

Berwal, S. (2008). Impact of an intervention programme on awareness levels and attitudes of high school students, teachers and administrators towards pupils with disabilities in inclusive settings. Unpublished Ph.D. Thesis, Department of Education, Kurukshetra University, Kurukshetra.

Cardona, C.M. (2009). Teacher Education Students' Beliefs of Inclusion and Perceived Competence to Teach Students with Disabilities in Spain. *Journal of the International Association of Special Education, 10*(1), 33–41.

Dapudong, R.C. (2014). Teachers' Knowledge and Attitude towards Inclusive Education: Basis for an Enhanced Professional Development Program. *International Journal of Learning and Development, 4*(4). https://doi.org/10.5296/ijld.v4i4.6116.

Edwardraj, S., Mumtaj, K., Prasad, J.H., Kuruvilla, A., and Jacob, K.S. (2010). Perceptions about intellectual disability: a qualitative study from Vellore, South India. *JIDR—Journal of Intellectual Disability, 54*(8), 736–748. https://doi.org/10.1111/j.1365-2788.2010.01301.

Forlin, C., Kawai, N., and Higuchi, S. (2015). Educational reform in Japan towards inclusion: Are we training teachers for success? *International Journal of Inclusive Education, 19*(3), 314–331.

Guðjónsdóttir, H., Cacciattolo, M., Dakich, E., Davies, A., Kelly, C., and Dalmau, M. C. (2008). Transformative Pathways: Inclusive Pedagogies in Teacher Education. *Journal of Research on Technology in Education, 40*(2), 165–182.

Gowramma, I. P., Gangmei, E., and Behera, L. (2018). Research in Education of Children with Disabilities. *Indian Educational Review, 56*(2), 7–93.

Jha, M.M. (2002). Barriers to access and success: Is inclusive education an answer? Paper presented at the Commonwealth of Learning (2002) Pan-Commonwealth forum on open learning: Open learning: transforming education for development. 29 July–2 August 2002, 16, Durban, South Africa.

Johansson, Shruti-Taneja. (2014). A critical and contextual approach to inclusive education: perspectives from an Indian context. *International Journal of Inclusive Education, 18*(12), 1219–1236. https://doi.org/10.1080/13603116.2014.885594

Kuppusamy, B.B., Narayan, J., and Nair, D. (2012). Awareness among family members of children with intellectual disability on relevant legislations in India. *Disability, CBR & Inclusive Development, 23*(1), 92–99.

Lindsay, S., and McPherson, A. C. (2011). Strategies For Improving Disability Awareness and Social Inclusion of Children and Young People with Cerebral Palsy. *Child: Care, Health and Development, 38*(6), 809–816.

Myreddi, V. and J. Narayan. (2000). Preparation of special education teachers: Present status and future trends. *Asia Pacific Disability Rehabilitation Journal, 10*(1),1–8.

McLennon, S. M. (2012). Knowledge, attitudes, and skills related to disabilities among psychologists: Are we competent to practice in this multicultural domain? (Unpublished doctoral dissertation). Seton Hall University, South Orange, NJ.

MHRD (2015). Annual Report (2014-15) of the Department of School Education and Literacy. New Delhi: Government of India. Retrieved from http:// mhrd.gov.in/ sites/upload files/mhrd/ files/ document-reports/Part1.pdf

Morin, D., Rivard, M., Crocker, A., Boursier, C. and Caron, J. (2012). Public attitudes towards intellectual disability: A multidimensional perspective. *Journal of Intellectual Disability Research*, *57*(3), 279–292. https://doi.org/10.1111/jir.12008

NCERT (n.d). A Study of Inclusiveness of Schools at the Elementary Level. Retrieved from https://ncert.nic.in

Pandey, S.P. (1991). Study of the disabled in rural society of Eastern Uttar Pradesh with special reference to Bahraich, Deoria, Partapharh and Ballia. Independent study, Pandit Govind Ballabh Pant Institute of Studies in Rural Development, Lucknow.

Pandey, Y. (2009). A study of barriers in the implementation of inclusive education at the elementary level. (Unpublished Ph.D. Thesis), Department of Educational Studies, JamiaMilliaIslamia University, Delhi.

Punani, B. (2000). Integrated education for children with disabilities. *Journal of Indian education, 30*(1), 39–46.

RMSA (2009). MHRD, Government of India.

Reddy, G., and Sujathamalini, J. (2005). Awareness, attitudes and competencies of special school teachers. *Edutracks, 6*(4).

RTE Act (2010). *Right of Children to Free and Compulsory Education Act*. Ministry of Law and Justice, Government of India, New Delhi.

Sharp, N., McIntyre, S., Rothery, S., Smithers-Sheedy, H., Goldsmith, S., Parsonage, S., and Foy, L. (2010). 'Just like you': A disability awareness programme for children that enhanced knowledge, attitudes and acceptance: Pilot study findings. *Developmental Neurorehabilitation, 13(5),* 360-368. https://doi.org/10.3109/17518423.2010.496764.

Singal, N. (2006). Inclusive Education in India: International concept, national interpretation. *International Journal of Disability, Development and Education, 53*(3), 351–369. https://doi.org/– 10.1080 /10349120600847797.

Sharda, B., and Ranjan, R. (2011). A study on awareness and attitude of the teachers working in CBSE schools in Coimbatore city towards inclusive education. *Proceedings of National Seminar on Inclusive Education for Children with Mental Retardation- An Introspection by Faculty of Disability Management and Special Education*. Ramakrishna Mission Vivekananda University: Coimbatore.

Sharma, U. and Deppeler, J. (2005). Integrated education in India: Challenges and prospects. *Disabilities Studies Quarterly, 25*(1). https://doi.org/10.18061/dsq.v25i1.524

Sharma, U., Forlin, C., Deppeler, J., and Yang, G. (2013). Reforming teacher education for inclusion in developing countries in the Asia Pacific region. *Asian Journal of Inclusive Education, 1*(1), 3-16.

Sharma, Y. (2018). How Distant is 'Inclusion?': A Study of Delhi School Teachers. *Indian Educational Review, 56*(2), 94–113.

Yellin, P., Yellin, D., Claypool, P., Mokhtari, K., Carr, R., Latiker, T., Risley, L., and Szabo, S. (2003). 'I'm not sure I can handle the kids, especially the, uh, you know special needs kids.' *Action in Teacher Education, 1*(25), 14–19.

SSA (2007). Inclusive education in SSA. Retrieved from 164.100.51.121/inclusive-educati–on/Inclusive_Edu_May07.pdf.

Singal, N., and Muthukrishna, N. (2014). Education, childhood and disability in countries of the South–Re-positioning the debates. *Childhood, 21*(3), 293–307.

Singal, N. (2013). Education of Children with Disabilities: Need for greater reflection. Yojana. Retrieved from http://yojana.gov.in/cms/(S(cbri1h3kwveo wrm0jdazpn45))/pdf/Yojana/English/2013/Yojana%20April%202013.pdf

UNESCO (2019). N for Nose: State of the Education Report for India 2019: Children with Disabilities. Retrieved from https://unesco.org

WHO (2011). World Report on Disability. Retrieved from https://www.who.inᵇworld report › 2011 › report

Williamson, C. (2014). Effects of Disability Awareness Educational Programs on an Inclusive Classroom. *Honors Projects*. 134. Bowling Green State University, OH. Retrieved from https://scholarworks.bgsu.edu/honorsprojects/134

Yadav, S. (2002). Effects of an intervention programme on the awareness and opinion of students and teachers about disability. Unpublished Ph.D. Thesis, Department of Education, Kurukshetra University, Kurukshetra.

Authors:

Sandeep Berwal

Professor, Faculty of Education, Chaudhary Ranbir Singh University, Jind, Haryana, India; e-mail: berwal_suhani@yahoo.com

Profesor, Fakulteta za izobraževanje, Univerza Chaudhary Ranbir Singh, Jind, Haryana, Indija; e-pošta: berwal_suhani@yahoo.com

Varuna Tehlan Dahiya

Professor, Faculty of Education, Bhagat Phool Singh Women's University, Sonipat, Haryana, India; e-mail: varuna@bpswomenuniversity.ac.in

Profesor, Fakulteta za izobraževanje, Univerza Bhagat Phool Singh za ženske, Sonipat, Haryana, Indija; e-pošta: varuna@bpswomenuniversity.ac.in

Razvijanje mnogoterih inteligentnosti učencev na izbrani osnovni šoli

Vanja Riccarda Kiswarday[1] & Andreja Cerovšek[2]

[1]Univerza na Primorskem, Pedagoška fakulteta, Koper, Slovenija
[2]Osnovna šola Grm Novo Mesto, Novo Mesto, Slovenija

Corresponding author/Korespondenčni avtor/
vanjariccarda.kiswarday@upr.si

Abstract/Izvleček

V prispevku raziskujemo ozaveščenost pedagoških delavcev glede uporabe Gardnerjeve teorije mnogoterih inteligentnosti v izbrani osnovni šoli. V raziskavi je sodelovalo 49 pedagoških delavcev izbrane osnovne šole. Ugotovili smo, da so v splošnem seznanjeni z Gardnerjevo teorijo mnogoterih inteligentnosti, vendar je večina pri pouku ne uporablja načrtno. Najpogosteje razvijajo medosebno, besedno-jezikovno in matematično-logično inteligentnost, telesno-gibalna, duhovna in glasbeno-ritmična pa ostajajo najslabše zastopane. V inkluzivni šoli je ključno, da učitelji uporabljajo univerzalni dizajn učenja, ki nagovarja različne vrste inteligentnosti in omogoča bolj diferencirano poučevanje.

The Importance of Developing Multiple Intelligences Among Pupils at Inclusive Primary Schools

In this article, we explore the awareness of educational professionals regarding the use of Gardner's theory of multiple intelligences (MI) in inclusive schools. The research involved 49 educational professionals from selected primary schools. We found that they were generally familiar with Gardner's MI theory, but most do not use it intentionally in their teaching. They most often develop interpersonal, verbal-linguistic, and mathematical-logical intelligence, while bodily-kinesthetic, spiritual, and musical-rhythmic intelligences remain less frequently stimulated. In an inclusive school, it is crucial for teachers to use Universal Design for Learning, which addresses different types of intelligence and enables more differentiated teaching.

University of Maribor Press

Uvod

Sodobna psihologija pojmuje učenje z vidika nevrorazličnosti in izpostavlja pomen upoštevanja nevrorazvojnih specifik za uspešno individualizacijo in diferenciacijo učenja (Shearer, 2004), ki je pomembna za učinkovito učenje vseh učencev, posebej tistih s posebnimi potrebami. Pomen ustrezno prilagojenega poučevanja glede posameznikovih nevrološko pogojenih specifik izpostavlja tudi Levine (2002), ki zagovarja tezo, da različni umi delujejo in se učijo različno in da je ključna naloga inkluzivne šole, da procese učenja diferencira in individualizira na način, da pri učencih zbuja zadovoljstvo in dosežke namesto frustracij in neuspeha. Levine (2002) poudarja, da lahko starši in učitelji z osredinjenjem na otrokove prednosti ter prilagajanjem njegovim šibkostim in primanjkljajem ustvarjajo raznoliko in spodbudno učno okolje, v katerem lahko možgani ustvarjajo lastne, edinstvene pojmovne mreže. Tak pristop je posebej pomemben za učence s posebnimi potrebami, sploh tiste, ki so nadarjeni, torej dvojno izjemni in so njihovi potenciali še vedno pogosto spregledani in premalo upoštevani (Kiswarday, 2018).

Gardner (1995) v teoriji mnogoterih vrst inteligentnosti (tudi multiplih inteligentnosti) zavrača obstoj ene same, splošne inteligentnosti človeka, ki jo zmorejo prepoznati psihometrični testi. V preučevanju učenja in delovanja ljudi v učnih situacijah prepričljivo dokazuje obstoj mnogoterih inteligentnosti. Gardner je sprva (1983) opredelil sedem inteligentnosti, in sicer: logično-matematično, jezikovno, vidno-prostorsko, glasbeno-ritmično, telesno-gibalno, osebno in medosebno, leta 1999 pa je dodal še naravoslovno in duhovno oz. eksistencialno inteligentnost (Gardner, 1995; 2006) ter pedagoško inteligentnost (Gardner, 2011) v smislu kompetenc za vseživljensko učenje in zmožnosti za pridobivanje prenosa znanja. Razvoj mnogoterih inteligentnosti je dinamičen proces, saj je povezan z uporabo in razvojem predispozicij, ki so močno odvisne od dedne zasnove, posameznikove aktivnosti pa tudi od okolja v smislu kulture in vrednot družbe (Gardner, 2006). Izrazna moč individualnih sposobnosti se uresniči s posameznikovim močnim interesom in vztrajnostjo, s posameznikovo prožnostjo, divergentnim mišljenjem, domišljijo in izvirnostjo prirojene sposobnosti (Kiswarday, 2014; Kukanja Gabrijelčič in Gorela, 2018; Renzulli 2016).

Za optimalen razvoj mnogoterih inteligentnosti je ključno učinkovito izkoristiti najzgodnejše obdobje otrokovega razvoja ter celotno obdobje šolanja, ko so čustveni, gibalni, socialni in kognitivni procesi najintenzivnejši.

V tem obdobju otrok spontano, z igro in učenjem, razvija samopodobo, razume medosebne odnose ter pridobiva sposobnosti povezovanja in sklepanja. Pri spodbujanju radovednosti, učenja ter razvoja različnih spretnosti in znanj imajo ključno vlogo starši, vzgojitelji in učitelji, pa tudi drugi strokovnjaki, vključeni v vzgojno-izobraževalni proces otrok in mladostnikov. Implementacija teorije mnogoterih inteligentnosti v inkluzivno izobraževanje je smiselna, saj temelji na spoznanju, da učenci razmišljajo in se učijo na različne načine. Inkluzivna paradigma zagovarja individualiziran pristop k vzgoji in izobraževanju, ki izhaja iz učenčevih močnih področij, interesov in potencialov. Pri tem se poudarja uporabo veččutnih pristopov ter spodbujanje aktivnega in sodelovalnega učenja, kar omogoča večjo prilagodljivost pouka ter optimalen razvoj vsakega učenca. Ključno načelo Gardnerjeve teorije (2006) je, da vsak posameznik razpolaga z vsemi vrstami inteligentnosti, vendar so te razvite v različnih razmerjih. To pomeni, da imajo ljudje edinstvene kognitivne profile, kar zahteva prilagojene pristope k poučevanju in učenju, ki upoštevajo in izgrajujejo njihove specifične močne strani in potenciale (Gardner, 2006; Levine, 2002). Izhodišče učne diferenciacije in individualizacije mora zato temeljiti na dobrem poznavanju značilnosti, potreb in interesov posameznega učenca, načrt izobraževalne poti pa pripravljen na temelju prepoznanega profila inteligentnosti ter posameznikovega učnega stila (Kolb, 1984). Prav vsaka od mnogoterih inteligentnosti lahko predstavlja modaliteto, po kateri se učencem personalizira za učenje pomembne kognitivne in emocionalne procese, kot so pozornost, spomin, motivacija, ustvarjalnost, reševanje problemov (Altan, 2020; Levine, 2002). Pomembno je, da je učitelj, ki si prizadeva za kakovostno inkluzijo, pozoren, da zagotovi pogoje za obe, izobraževalno in socialno inkluzijo (Katz, 2013). Izobraževalno, da omogoči dostopnost vseh učnih vsebin in možnosti za polno vključenost in sodelovanje v vseh učnih aktivnostih; socialno pa tako, da v razredu zagotovi priložnosti za kakovostno in sodelujočo medvrstniško interakcijo in utrjuje občutek pripadnosti skupini. Katz (2013, str. 155) v pregledni študiji povzema, da številni raziskovalci (npr. Kambouka idr., 2007 ter Timmons in Wagner, 2008) izpostavljajo, da socialna vključenost, ki vpliva na dobro počutje posameznika, pomembno vpliva na posameznikov celostni razvoj, rezilientnost in duševno zdravje (Katz, 2013; Kiswarday, 2014). Raziskave potrjujejo, da učitelji pozitivno ocenjujejo učinkovitost različnih učnih pristopov (Plešec Gasparič in Valenčič Zuljan, 2019). Uporaba teorije mnogoterih inteligentnosti pri pouku predstavlja dragoceno orodje

za pedagoške delavce, saj omogoča upoštevanje individualnih učnih stilov ter prispeva k učinkoviti diferenciaciji in individualizaciji vzgojno-izobraževalnega procesa (Thousand, 2007; Tomlinson, 2003).

Inkluzivno izobraževanje stremi k postavljanju visokih vzgojno-izobraževalnih standardov za vse učence in k ustvarjanju pogojev za dosego teh (Katz, 2013). V heterogenih in številčnih oddelkih večine javnih osnovnih in srednjih šol lahko inkluzivno učno okolje ustvarjamo z upoštevanjem Gardnerjeve teorije o mnogoterih inteligentnosti in zagotavljanjem pogojev za njihovo razvijanje (Shearer, 2004). Uporaba podporne in informacijsko-komunikacijske tehnologije, ki jo v didaktične namene razvijajo v okviru pristopa univerzalnega oz. inkluzivnega modela učenja (angl. *Universal Design for Learning* – dalje UDL; Rose in Meyer, 2002), povečuje dostopnost učnih vsebin in uporabo raznovrstnih medijev za predstavitev in izkazovanje znanja učencev z različnimi zmožnostmi in potrebami (Benton-Borghi, 2013). UDL podpira uresničevanje načela enakih možnosti in optimalnega razvoja posameznika (Krek in Metljak, 2011) ter predstavlja okvir za učinkovitejše poučevanje heterogenih skupin učencev in uresničevanje načela inkluzivnosti. Temelji na ideji zagotavljanja izkustvenih in fleksibilnih načinov učenja (Kiswarday, 2018). Pionirja UDL Rose in Meyer (2002) ob inkluzivno načrtovanih učilnicah – opremljenih z inkluzivnimi didaktičnimi sredstvi – posebej izpostavljata tudi pomen uporabe sodobne in podporne tehnologije, ki je namenjena premostitvi posameznikovih ovir pri učenju. S tega vidika psihologije učenja in prilagodljivih poučevalnih pristopov Rose in Meyer (2002) poudarjata pomen aktivacije treh možganskih omrežij: afektivnega (motivacija – zakaj se učimo), procesnega (prepoznavanje in razumevanje – kaj se učimo) in strateškega (učne strategije – kako se učimo). UDL temelji na prepoznanju nevrodiverzitete in individualnih učnih poti, s čimer učencem omogoča izbiro različnih načinov učenja in izkazovanja znanja. V tem kontekstu Gardnerjeva teorija mnogoterih inteligentnosti ponuja dragoceno vodilo za učitelje pri diferenciaciji in individualizaciji pouka (Schmidt in Huang, 2021).

UDL spodbuja multisenzorno okolje, uporabo podpornih tehnologij ter prilagojene pristope, ki upoštevajo senzorične in kognitivne raznolikosti učencev. S tem krepi motivacijo, ustvarjalnost in inovativnost ter se povezuje z drugimi inkluzivnimi modeli, kot so odziv na obravnavo (Fuchs in Fuchs, 2006), sodelovalno poučevanje (Friend, 2014) in formativno spremljanje (Wiliam, 2006). Implementacija UDL v vzgojo in izobraževanje (Katz 2019) zajema tri ključne vidike, ki so pomembni tudi

za implementacijo mnogoterih inteligentnosti: (1) sistemski okvir, ki vključuje vizijo šole, profesionalni razvoj in inkluzivne pedagoške prakse; (2) diferencirano in individualizirano poučevanje, ki učencem omogoča izbiro in soustvarjanje učnega procesa; ter (3) socialno in čustveno učenje, ki gradi sočutne in sodelovalne učne skupnosti.

Modeli inkluzivnega poučevanja, ki spodbujajo razvoj mnogoterih inteligentnosti

Temeljno načelo inkluzije je, da se lahko vsi otroci učijo, če se učitelji naučimo, kako jih učiti. Pri tem ima ključno vlogo sodelovalno poučevanje, ki temelji na tesnem sodelovanju strokovnih delavcev (Friend, 2014) in omogoča uporabo prilagojenih učnih strategij, skladnih z raznolikimi učnimi potrebami učencev. Teorija mnogoterih inteligentnosti ponuja dragocena izhodišča za inkluzivno pedagogiko, saj poudarja, da imajo učenci različna močna področja, ki jih je mogoče spodbujati in razvijati z ustreznim poučevanjem. Inkluzivni učni modeli spodbujajo motivacijo in aktivno sodelovanje učencev, hkrati pa jim omogočajo razvoj lastnih kognitivnih potencialov (Skinner, Kindermann in Furrer, 2009).

McGuire, Scott in Shaw (2006) izpostavljajo, da učinkovito inkluzivno učno okolje učencem omogoča aktivno vključevanje in soustvarjanje vzgojno-izobraževalnega procesa, to pa prispeva tako k učni kot tudi k socialni inkluziji. V skladu s teorijo mnogoterih inteligentnosti to pomeni, da učitelji pri načrtovanju pouka upoštevajo različne učne stile in inteligentnosti učencev ter ustrezno prilagajajo metode poučevanja, strategije ocenjevanja in oblike preverjanja znanja (Cerovšek, 2022). Raznoliko in dinamično učno okolje omogoča optimalno diferenciacijo nalog, prilagodljiv tempo učenja ter večjo izbiro učnih strategij, kar učencem zagotavlja boljše pogoje za izgradnjo lastnega znanja.

Formativno spremljanje kot eden izmed ključnih inkluzivnih pristopov prispeva k dinamični interakciji med učiteljem, učencem, vrstniki in učno snovjo ter spodbuja razvoj različnih učenčevih sposobnosti in interesov (Komljanc, 2008). Procesno razvijanje učenja temelji na močnih področjih učenca in zagotavlja podporo tam, kjer jo potrebuje, kar je skladno z načeli mnogoterih inteligentnosti. Učenci postanejo aktivni soustvarjalci učnega procesa, pri čemer se spodbujajo medsebojno sodelovanje, refleksija ter izražanje znanja na različne načine – prek zapisov, plakatov, izdelkov, projektnega dela in drugih kreativnih oblik (Holcar Brunauer idr., 2017).

Tak pristop ne le podpira inkluzivnost, temveč tudi omogoča, da vsak učenec lahko izrazi svoje potenciale na način, ki ustreza njegovim močnim področjem inteligentnosti.

Namen in cilji raziskave

Namen raziskave je bil preučiti ozaveščenost pedagoških delavcev o nevrorazličnosti in spodbuditi načrtno razvijanje mnogoterih inteligentnosti učencev v inkluzivnem šolskem okolju. Osredinili smo se na prepoznavanje učenčevih močnih področij in potreb v povezavi z nevrorazvojnim profilom (Levine, 2002) ter ugotoviti, kako uporaba mnogoterih inteligentnosti prispeva k premagovanju primanjkljajev in razvoju potencialov (Gardner, 2006).

Raziskava je preverjala: (1) stališča pedagoških delavcev do pomena mnogoterih inteligentnosti pri pouku, (2) pogostost uporabe strategij za njihov razvoj, (3) najpogosteje spodbujene vrste inteligentnosti pri pouku ter (4) sodelovanje učiteljev in šolske svetovalne službe pri razvijanju mnogoterih inteligentnosti v okviru medpredmetnega povezovanja in/ali sodelovalnega poučevanja, ki sta ključna za učinkovito podporo učencem, zlasti tistim s posebnimi potrebami (Kiswarday, 2020; Kiswarday, Rejc in Pak, 2020).

Zastavili smo si naslednje hipoteze:

H 1: Pedagoški delavci najpogosteje razvijajo besedno-jezikovno in matematično-logično inteligentnost.

H 2: Pedagoški delavci, ki bolje poznajo teorijo mnogoterih inteligentnosti, pri učencih razvijajo več vrst inteligentnosti kot tisti, ki tega znanja nimajo.

H 3: Pedagoški delavci menijo, da imajo učitelji razredne stopnje boljše možnosti za razvijanje mnogoterih inteligentnosti učencev kot učitelji predmetne stopnje.

H 4: Pedagoški delavci, ki razvijajo mnogoterne inteligentnosti učencev, se pogosteje povezujejo s šolsko svetovalno službo in pogosteje izvajajo sodelovalno poučevanje.

Raziskovalne metode

Za izvedbo raziskave smo uporabili deskriptivno in inferenčno metodo empiričnega pedagoškega raziskovanja, kjer smo uporabili kombiniran kvantitativni in kvalitativni raziskovalni pristop. Raziskava je zajemala zbiranje podatkov z uporabo spletne ankete, ki omogoča preverjanje in analizo stališč pedagoških delavcev do pomena

mnogoterih inteligentnosti pri pouku in glede pogostosti uporabe strategij za njihov razvoj.

Vzorec

Uporabili smo namensko vzorčenje in k reševanju spletne ankete povabili pedagoške delavce ene od ene od osnovnih šol v osrednji Sloveniji. Odzvalo se je 69 pedagoških delavcev, vendar smo v končno obdelavo podatkov lahko zajeli le 49 veljavnih vprašalnikov (71 %). Vzorec je bil sestavljen iz 39 žensk (79,6 %) in 10 moških (20,4 %). Od tega je bilo 19 učiteljev razredne stopnje (38,8 %) in 19 učiteljev predmetne stopnje (38,8 %). Sedem (14,3 %) anketirancev je bilo iz svetovalne službe ali so izvajali dodatno strokovno pomoč, štirje (8,2 %) pa so poučevali v oddelkih podaljšanega bivanja. Glede na delovno dobo je bilo največ anketiranih v šolstvu zaposlenih nad 20 let (21 oseb, 42,9 %), sledi od 11 do 20 let delovne dobe (22,5 %), od 3 do 10 let (22,5 %) in manj kot 2 leti delovne dobe (12,2 %).

Pripomočki

Za zbiranje podatkov smo uporabili spletni vprašalnik, oblikovan posebej za namen raziskave. Vprašalnik je vseboval štiri vprašanja zaprtega tipa, petstopenjsko lestvico stališč Likertovega tipa, štiri petstopenjske ocenjevalne lestvice in dve vprašanji odprtega tipa. Veljavnost vprašalnika smo preverili s pilotskim anketiranjem manjšega števila pedagoških delavcev, zanesljivost pa smo potrdili z izračunom cronbachovega koeficienta alfa ($\alpha = 0{,}827$ za »pogostost razvijanja MI«, $\alpha = 0{,}860$ za »primeren čas za razvijanje MI« in $\alpha = 0{,}684$ za »strinjanje s trditvami«). Veljavnost merskega inštrumenta smo potrdili s faktorsko analizo (KMO $= 0{,}747$, $\chi^2 = 217{,}445$, $G = 36$, $P = 0{,}000$). Kvalitativni del raziskave je vključeval analizo Letnega delovnega načrta šole za leto 2021/2022, da bi identificirali dejavnosti, ki spodbujajo razvoj mnogoterih inteligentnosti učencev.

Postopek zbiranja podatkov

Podatke smo zbrali v šolskem letu 2021/2022, pridobili smo jih z uporabo spletne ankete, ki je bila izvedena v okolju 1KA. Sodelovanje je bilo prostovoljno in anonimno. Vprašalnik je bil razdeljen pedagoškim delavcem, ki so izpolnili anketo v spletni obliki. Postopek zbiranja podatkov je bil enostaven in dostopen, saj so vsi anketiranci imeli dostop do vprašalnika po spletu.

Postopek obdelave podatkov

Podatke smo obdelali z uporabo statističnih metod, pri čemer smo uporabili programsko orodje IBM SPSS. Kvantitativni podatki so bili analizirani na ravni deskriptivne in inferenčne statistike. Za deskriptivno analizo smo uporabili frekvenčne tabele, srednje vrednosti in standardne deviacije. Za inferenčno analizo smo izvedli korelacijske in t-test analize, da bi ugotovili, ali obstajajo statistično pomembne razlike med različnimi skupinami pedagoških delavcev (glede na delovno dobo, strokovno izobrazbo itd.) glede na njihovo uporabo teorije mnogoterih inteligentnosti.

Rezultati in interpretacija

Najprej nas je zanimalo, kolikšen delež pedagoških delavcev sploh pozna Gardnerjevo teorijo o mnogoterih inteligentnosti in kaj menijo, kako dobro jo poznajo. Anketiranci so svoje odgovore izbirali na petstopenjski ocenjevalni lestvici (1 – sploh ne poznam, 5 – zelo dobro poznam).

Preglednica 1
Frekvence in deleži (v %) sodelujočih glede na poznavanje teorije mnogoterih inteligentnosti

Poznavanje teorije	F	f %
1 Sploh ne poznam.	5	10,2
2 Slabo poznam.	9	18,4
3 Niti pozam niti ne poznam.	22	44,9
4 Dobro poznam.	7	14,3
5 Zelo dobro poznam.	6	12,2
Skupaj	**49**	**100,0**

Ugotovili smo (preglednica 1), da teorije o mnogoterih inteligentnosti ne pozna desetina pedagoških delavcev (10,2 %); največ, skoraj polovica (44,9 %), pa se jih je opredelilo za srednjo možnost, da teorijo mnogoterih inteligentnosti niti pozna niti je ne pozna. Skoraj petina sodelujočih je odgovorila, da teorijo slabo pozna (18,4 %); dobro jo pozna 14,3 % sodelujočih; zelo dobro pa 12,2 %.

χ^2-preizkus hipoteze neodvisnosti za poznavanje teorije mnogoterih inteligentnosti glede na leta delovne dobe v šolstvu je pokazal, da je med strokovnimi delavci, ki zelo dobro poznajo teorijo mnogoterih inteligentnosti, največ zaposlenih v šolstvu nad 20 let (4), najmanj pa do 2 leti (0).

Anketirance smo povabili, da na petstopenjski Likertovi lestvici (1 – Nikoli., 2 – Redko., 3 – Včasih., 4 – Pogosto. in 5 – Zelo pogosto.) ocenijo, kako pogosto razvijajo posamezno inteligentnost svojih učencev.

Iz preglednice 2 je razvidno, da je največ pedagoških delavcev (27) zelo pogosto razvijalo medosebno inteligentnost. Veliko (20) jih je zelo pogosto razvijalo logično-matematično inteligentnost ter besedno-jezikovno inteligentnost (19). Inteligentnost, ki je nikoli ni razvijalo največje število pedagoških delavcev, je glasbeno-ritmična inteligentnost (15), sledita pa ji duhovna oz. eksistencialna (10) in telesno-gibalna inteligentnost (9).

Rezultati kažejo, da so pedagoški delavci najbolj osredinjeni na logično-matematično in besedno-jezikovno inteligentnost. Logično-matematično inteligentnost razvija 67,3 % pedagoških delavcev "pogosto" ali "zelo pogosto"; medtem ko besedno-jezikovno inteligentnost 69,4 %. To je v skladu z večjim poudarkom teh vrst inteligentnosti v šolskem kurikulumu.

Vidno-prostorska inteligentnost se "pogosto" ali "zelo pogosto" razvija pri 57,1 % učiteljev, kar kaže na visoko vključevanje vizualnih in prostorskih dejavnosti v poučevanje. Telesno-gibalna inteligentnost je manj pogosto vključena, saj jo le 51 % pedagoških delavcev razvija "pogosto" ali "zelo pogosto", kar je lahko povezano z omejitvami učnega načrta.

Osebno in medosebnointeligentnost razvija več kot 70 % pedagoških delavcev, kar kaže na pomembnost čustvene in socialne podpore učencem v učnem procesu.

Na drugi strani pa sta glasbeno-ritmična in duhovna/inteligentnost manj vključeni v učni proces, saj jih le 32,7 % oziroma 30,6 % pedagoških delavcev razvija pogosto.

Iz povprečnih vrednosti za mnogotere inteligentnosti lahko sklepamo na pogostost uporabe teh inteligentnosti pri pedagoškem delu. Najvišjo povprečno vrednost, ki je edina nad oceno 4 (pogosto), je dosegla medosebna inteligentnost ($\bar{x}$ = 4,22), kar nakazuje, da se pedagoški delavci pogosto osredinjajo na razvoj medosebnih veščin, kot so sodelovanje in socialna interakcija med učenci.

Preglednica 2
Frekvence in deleži (v %) pedagoških delavcev glede na pogostost razvijanja posamezne inteligentnosti ter povprečne vrednosti rangov za posamezne vrste inteligentnosti

Pogostost izvajanja dejavnosti za razvijanje posamezne vrste inteligentnosti		1 Nikoli.	2 Redko.	3 Včasih.	4 Pogosto.	5 Zelo pogosto.	Skupaj	x̄ Rang
Vrsta inteligentnosti								
Logično-matematična	f	3	6	7	13	20	49	3,76
	f (%)	6,1	12,3	14,3	26,5	40,8	100	
Besedno-jezikovna	f	3	4	8	15	19	49	3,80
	f (%)	6,1	8,2	16,3	30,6	38,8	100	
Glasbeno-ritmična	f	15	10	8	7	9	49	2,64
	f (%)	30,6	20,4	16,3	14,3	18,4	100	
Vidno-prostorska	f	5	8	8	15	13	49	3,40
	f (%)	10,2	16,3	16,3	30,6	26,5	100	
Telesno-gibalna	f	9	11	4	12	13	49	3,12
	f (%)	18,4	22,4	8,2	24,5	26,5	100	
Osebna	f	2	7	4	21	15	49	3,74
	f (%)	4,1	14,3	8,2	42,8	30,6	100	
Medosebna	f	1	3	3	15	27	49	4,22
	f (%)	2,1	6,1	6,1	30,6	55,1	100	
Naravoslovna	f	5	8	12	10	14	49	3,34
	f (%)	10,2	16,3	24,5	20,4	28,6	100	
Duhovna oz. eksistencialna	f	10	12	12	8	7	49	2,74
	f (%)	20,4	24,5	24,5	16,3	14,3	100	

Besedno-jezikovna (x̄ = 3,80) in matematično-logična (x̄ = 3,76) inteligentnost sta prav tako na visoki ravni, kar je v skladu s poudarkom na teh vrstah inteligentnosti v šolskih kurikulumih. Sledijo jim osebna inteligentnost (x̄ = 3,74), ki nakazuje osredinjenost na razvoj čustvene in osebne zrelosti učencev, ter vidno-prostorska (x̄ = 3,40) in naravoslovna inteligentnost (x̄ = 3,34), ki se prav tako pogosto razvijata v učnem procesu. Telesno-gibalna (x̄ = 3,12), duhovna (x̄ = 2,74) in glasbeno-ritmična (x̄ = 2,64) inteligentnost dosegajo nižje povprečne vrednosti, kar kaže, da so te vrste inteligentnosti nekoliko manj spodbujane v vsakodnevnem učnem procesu.

Zagotovo bi bila za holistično učenje dobrodošla večja ozaveščenost učiteljev o spodbujanju različnih vrst inteligentnosti, ki niso omejene le na tradicionalne akademske sposobnosti.

Glede na rezultate lahko našo prvo hipotezo pogojno potrdimo, saj smo predpostavljali, da pedagoški delavci med poukom najbolj razvijajo besedno-jezikovno in matematično-logično inteligentnost. Vendar pa so podatki pokazali, da v povprečju še bolj razvijajo medosebno inteligentnost ($\bar{x}$ = 4,22), to pa nakazuje, da je večja pozornost namenjena razvoju socialnih veščin in sodelovanja med učenci. To odstopanje od pričakovanj izpostavlja pomembnost medosebnih veščin v učnem procesu in niti ne pomeni neposrednega nasprotovanja izhodiščni hipotezi, saj besedno-jezikovna ($\bar{x}$ = 3,80) in matematično-logična ($\bar{x}$ = 3,76) inteligentnost sledita medosebni in se še vedno razvijata v visokem obsegu.

Zanimalo pa nas je tudi, ali je pogostost spodbujanja razvoja mnogoterih inteligentnosti pri učencih pomembno povezana s poznavanjem teorije o mnogoterih inteligentnosti. Spearmanov korelacijski koeficient je pokazal, da med spremenljivkama 'poznavanje teorije o mnogoterih inteligentnosti in 'pogostost razvijanja mnogoterih inteligentnosti pri učencih' obstaja pozitivna srednja povezanost (n = 49, p = 0,000, r = +0,566), zato smo lahko našo drugo hipotezo sprejeli in potrdili.

V okviru tretje hipoteze smo preverjali mnenje pedagoških delavcev glede večjih možnosti za spodbujanje razvoja mnogoterih inteligentnosti učencev na razredni oz. predmetni stopnji. Iz preglednice 3 je razvidno, da se je več kot polovica sodelujočih s tem strinjala (40,8 %) oz. popolnoma strinjala (10,2 %). Dobra četrtina (26,5 %) se jih ni mogla odločiti, slaba petina (18,4 %) se jih ni strinjala; 4,1 % pa se jih s to trditvijo sploh ni strinjala (preglednica 3).

Statistično pomembnost razlik v mnenjih, da imajo učitelji razredne stopnje boljše možnosti za razvijanje mnogoterih inteligentnosti učencev v primerjavi z učitelji predmetne stopnje, smo preverili s χ^2-preizkusom, ki pa razlik ni potrdil kot statistično relevantnih (χ^2 = 15,316, g = 12, p = 0,225), zato smo tretjo hipotezo ovrgli.

Preglednica 3

Frekvence in deleži sodelujočih glede stališča, da imajo učitelji razredne stopnje boljše možnosti za razvijanje mnogoterih inteligentnosti učencev kot učitelji predmetne stopnje.

	Ocene	F	f (%)
1	Se sploh ne strinjam.	2	4,1
2	Se ne strinjam.	9	18,4
3	Niti se strinjam niti se ne strinjam.	13	26,5
4	Večinoma se strinjam se.	20	40,8
5	Popolnoma se strinjam.	5	10,2
Skupaj		49	100,0

Mnenja učiteljev se sicer nagibajo k prepričanju, da imajo učitelji razrednega pouka boljše možnosti za razvijanje mnogoterih inteligentnosti učencev v primerjavi z učitelji predmetne stopnje, saj razredni učitelji poučujejo učence vse predmete in jih spoznavajo bolj celostno. Odgovorni so za celoten učni proces in z učenci preživijo več časa. To jim omogoča, da bolje spoznajo učenčevo osebnost, interese ter močna in šibka področja, kar je ključno za razvoj različnih vrst inteligentnosti. Dodatne možnosti za razvijanje teh jim omogoča tudi večja fleksibilnost pri organizaciji prostora, izbiri učnih metod in medpredmetnem povezovanju. Vseeno pa ugotavljamo, da anketirani menijo, da imajo tudi učitelji predmetne stopnje veliko priložnosti za razvijanje mnogoterih inteligentnosti pri učencih, saj so strokovnjaki na svojem področju in lahko z različnih aspektov raziskujejo specifične vsebine, pogosto se osredinjanjo na poglobljeno razumevanje predmetnih področij, kar omogoča razvijanje specifičnih veščin in intelektualnih sposobnosti, povezanih z različnimi vrstami inteligentnosti, kot so analitično razmišljanje, ustvarjalnost in reševanje kompleksnih problemov in podobno. Tako omogočajo tudi bolj individualizirano učenje, prilagojeno različnim učnim potrebam, interesom in izstopajočim močnim področjem.

Na koncu smo ugotavljali še, v kolikšni meri sodelovalno poučevanje učiteljev in svetovalnih delavcev oz. izvajalcev dodatne strokovne pomoči pripomore k večjemu razvijanju mnogoterih inteligentnosti. Anketirani so sicer sodelovalno poučevanje in medpredmetno povezovanje prepoznali kot učinkovit način izvajanja pouka in spodbujanja razvoja mnogoterih inteligentnosti učencev, vendar se ju s tem namenom niso posluževali tako pogosto kot smo pričakovali, kar je razvidno iz preglednice 4.

Preglednica 4
Pogostost sodelovanja učiteljev in šolske svetovalne službe z namenom spodbujanja in krepitve mnogoterih inteligentnosti pri učencih

	f	f (%)
1 Nikoli.	14	28,6
2 Redko.	12	24,5
3 Včasih.	11	22,4
4 Pogosto.	7	14,3
5 Zelo pogosto.	5	10,2
Skupaj	49	100,0

Pedagoški delavci so na petstopenjski Likertovi lestvici od nikoli (1) do zelo pogosto (5) izbirali odgovore glede sodelovanja med učitelji in svetovalnimi delavci z namenom spodbujanja in krepitve mnogoterih inteligentnosti pri učencih. Največji delež pedagoških delavcev (28,6 %) pri spodbujanju razvoja mnogoterih inteligentnosti učencev nikoli ni sodeloval s svetovalno službo. Sledijo pedagoški delavci, ki so s svetovalno službo sodelovali redko (24,5 %) in včasih (22,4 %). Manj je bilo pedagoških delavcev, ki so sodelovali pogosto (14,3 %), in najmanj tistih, ki so za spodbujanje razvijanja mnogoterih inteligentnosti učencev sodelovali zelo pogosto (10,2 %).

Rezultati, s katerimi smo ovrgli četrto hipotezo, kažejo na ugotovitev, da pedagoški delavci prepoznajo vrednost sodelovalnega poučevanja in medpredmetnega povezovanja, a se ju ne posložujejo prav pogosto. Razloge za to lahko iščemo v tem, da ti pristopi zahtevajo večjo pripravljenost, čas in usklajevanje, kar je lahko izziv v šolskem okolju z omejenimi viri in natrpanimi učnimi načrti. Predvidevamo tudi, da šolska svetovalna služba ne predstavlja edine oz. najpomembnejše pomoči učiteljem pri razvijanju mnogoterih inteligentnosti učencev. Na izbrani šoli se je izkazalo, da so učiteljem bolj v pomoč različna izobraževanja in usposabljanja na temo razvijanja mnogoterih inteligentnosti, literatura, ki jim omogoča lastno raziskovanje področja in razvijanja inovativnih pristopov.

Sklep

Raziskava o pomenu spodbujanja razvoja mnogoterih inteligentnosti učencev v inkluzivni osnovni šoli je bila izvedena kot študija primera izbrane šole, zato je rezultate težko posploševati na širšo populacijo.

Kljub temu pa so ugotovitve lahko dragocena podlaga za nadaljnje raziskovanje tega področja, ki še ni dovolj raziskano. Ugotovili smo, da večina pedagoških delavcev izbrane šole ni dobro seznanjena s teorijo mnogoterih inteligentnosti. Kljub temu da omenjena teorija pripisuje šolskemu okolju ključno vlogo pri razvoju inteligentnosti, skoraj polovica udeležencev ni jasno izrazila svojega stališča o pomenu šolskega okolja kot prostora, kjer naj bi se razvijale različne vrste mnogoterih inteligentnosti učencev. Pedagoški delavci so v veliki meri izpostavili potrebo po dodatnih znanjih in konkretnih usmeritvah za učinkovito izvajanje te naloge, zato se zdi nujno, da jih seznanimo z novejšimi dognanji na tem področju, saj ozaveščenost o lastnem profilu mnogoterih inteligentnosti posamezniku pripomore k učinkovitejšemu pridobivanju novih znanj in lažjemu soočanju z življenjskimi izzivi (Gardner, 2006).

Rezultati predstavljene raziskave so pokazali, da so pedagoški delavci najpogosteje razvijali medosebno, logično-matematično in besedno-jezikovno inteligentnost; medtem ko so področja vidno-prostorske, glasbeno-ritmične, telesno-gibalne ter duhovne oz. eksistencialne inteligentnosti razvijali manj. Kot smo poudarili, so mnogi učenci, predvsem tisti z učnimi težavami, šibki ravno na področjih levohemisfernih spretnosti, med katere sodita tudi besedno-jezikovna in logično-matematična inteligentnost.

Zanje bi bilo izredno dragoceno, če bi imeli več priložnosti za aktivacijo in razvoj različnih vrst inteligentnosti, predvsem prioritetnih, saj to prispeva k večjemu zadovoljstvu ter uspešnosti in učinkovitosti učenja (Altan, 2020; Bolanos, 2002; Gardner, 1995; 2006). Da bi pedagoški delavci v osnovni šoli zagotovili enake možnosti za dostop do učenja in izkazovanja znanja ter omogočili optimalno pot vseživljenjskega učenja posameznika (Krek in Metljak, 2011; Kiswarday, 2018), je ključno, da upoštevajo posameznikove nevrološke značilnosti, interese in potenciale (Levine, 2002).

Prepoznavanje in razvijanje mnogoterih inteligentnosti učencev predstavlja ključni korak pri uresničevanju kakovostnejše inkluzije, ki omogoča večjo dostopnost, napredek in uspehe v šoli ter dobro počutje tako učencev kot tudi učiteljev. Vključevanje teorije mnogoterih inteligentnosti v šolski prostor je dolgotrajen proces, ki zahteva premišljene korake. Temeljiti mora na podrobni analizi obstoječih šolskih procesov, vključno z natančnim pregledom ciljev, vsebin in didaktičnih priporočil učnih načrtov.

S posodobitvijo kurikulov, osredinjenih na razvoj mnogoterih inteligentnosti, ob upoštevanju družbenih vrednot in lastnega vrednostnega sistema je treba zagotoviti ustrezna orodja za prepoznavanje in spodbujanje razvoja mnogoterih inteligentnosti učencev ter ustrezno usposobljenost pedagoških delavcev.

Summary

The purpose of the study was to encourage the development of multiple intelligences in pupils at the selected primary school. It was noted that awareness of the importance of pupils' strengths is not unnoticed among the teachers and staff; nevertheless, they do give more attention to overcoming pupils' deficits, disabilities or disorders at the expense of developing their multiple intelligences. They mostly focus on developing linguistic-verbal and logical-mathematical intelligences, while other types of intelligence are neglected. Because there are a lot of children, especially those with learning disabilities and deficits in certain learning areas, who are less successful in linguistic-verbal and logical-mathematical intelligence fields, it is mandatory to include and develop other types of intelligences in the learning process as well (Cerovšek, 2022) – interpersonal, intrapersonal, visual-spatial, musical, bodily-kinaesthetic, naturalistic and spiritual or existential intelligence (Bolanos, 2002; Gardner, 1995; 2006).

Results of the study show that a vast majority (36) of teachers and other staff at the selected school stated that they were neither familiar nor unfamiliar with the theory; they barely knew it or did not know the theory at all. Moreover, more than half the participants in the study did not clearly define the notion of intelligence. Although the theory of multiple intelligences places great importance on the school environment, almost half the study participants did not state their point of view on the importance of the school environment as the most suitable setting for developing pupils' multiple intelligences. Most of them claimed that they needed additional skills and competences in addition to precise directions for effective execution of the task; therefore, providing information to the teachers and other staff at school on the latest notions of intelligences and the theory of multiple intelligences should be considered.

Furthermore, results show that intrapersonal and logical-mathematical as well as linguistic-verbal intelligences were the most common ones that were developed in 2021/2022, while the fields of musical, bodily-kinaesthetic and spiritual or existential

intelligences were almost ignored. As previously stated, numerous pupils, especially those with learning disabilities and deficits in certain learning areas, are usually less successful in the linguistic-verbal and logical-mathematical intelligences field. It is believed that these pupils, and others, should be given more opportunities to use different abilities in the learning process, especially their strengths. Consequently, they develop multiple intelligences, and studies show this has a strong impact on learning success and efficacy (Altan, 2020; Bolanos, 2002; Gardner, 1995; 2006). The awareness of one's own multiple intelligences profile (Gardner, 2006) enables one to gain new, sophisticated skills and competences that equip people to cope more efficiently with life problems.

Teachers and other staff at primary school must follow the principle of equal opportunities for and optimal development of each individual (Krek in Metljak, 2011; Kiswarday, 2018) as they are obliged to take care of a child's overall development, which can be related to developing multiple intelligences. By developing these, they influence the individual's success in the academic field as well as their behaviour and psychosocial integration. As a result, an individual can develop a positive self-image that affects their further education and professional path, while experiencing satisfaction in life.

Recognition and development of multiple intelligences in pupils is an important factor in the realization of high-quality inclusion because better conditions enable better accessibility, progress and higher achievements as well as promoting the well-being of all pupils and teachers.

Inclusion of the Theory of multiple intelligences in education is a complex and long-term process, which requires carefully considered steps. It should be based on a detailed analysis of existing school processes, including a precise overview of the aims, themes and didactic recommendations of the curriculum. Besides a renewed curriculum focusing on the development of diverse intelligences, considering social history and one's moral system, the implementation of the theory in schools requires suitable tools for the recognition and development of intelligences in pupils, as well as adequately qualified teachers and other staff who are the pillars of organization, implementation and assessment of multiple intelligences in pupils.

Literatura in viri

Altan, M. Z. (2020). Extrability and the theory of multiple intelligences as a phenomenon for an inclusive education renewal. *European Journal of Special Education Research*, [S. l.], jan. 2020.

Bolanos, P. (2002): Multiple Intelligences, Projects and Assessment. *Intervju za revijo Edutopia*. Pridobljeno 30. 6. 2022 s https://www.edutopia.org/ .

Cerovšek, A. (2022). *Razvijanje mnogovrstnih inteligentnosti učencev na izbrani osnovni šoli*. Magistrsko delo. Koper: Univerza na Primorskem, Pedagoška fakulteta.

Delors, J. (1998). *Learning: The treasure within*. Unesco.

Friend, M. (2014). *Co-Teach!: building and sustaining effective classroom partnerships in inclusive schools*. Marilyn Friend, Incorporated.

Fuchs, D., in Fuchs, L. S. (2006). Introduction to response to intervention: What, why, and how valid is it?. *Reading research quarterly, 41*(1), 93–99.

Gardner, H. (1995). *Razsežnosti uma: teorija o več inteligencah*. Ljubljana: Tangram.

Gardner, H. (2006). *Multiple intelligences: New horizons*. New York: Basic Books.

Ginsberg, M. B. (2005). 'Cultural diversity, motivation, and differentiation'. *Theory into Practice*, *44*(3), 218–225.

Goleman, D. (1995). *Emotional intelligence*. New York: Bantam Books

Holcar Brunauer, A., idr. (2017). *Formativno spremljanje v podporo učenju*. ZRSŠ.

Katz, J. (2013). The Three Block Model of Universal Design for Learning (UDL): Engaging students in inclusive education. *Canadian Journal of Education*, 36*(1),* 153–194.

Kiswarday, V. R. (2014). Model spodbujanja rezilientnosti v šolskem okolju. *Revija za elementarno izobraževanje, 12*(3). *str. 267–290.*

Kiswarday, V. R. (2018). Individualiziran program v inkluziji. V Schmidt Krajnc, M., Rus Kolar, D., & Kranjec, E. (Eds.). *Vloga inkluzivnega pedagoga v vzgoji in izobraževanju – konferenčni zbornik, 2018*, 47–58.

Kiswarday, V. R. (2020). *Individualizacija vzgoje in izobraževanja v inkluziji - študijsko gradivo*. Koper: Univerza na Primorskem, Pedagoška fakulteta.

Kiswarday, V.R., Rejc, M., in Pak, M. (2020). *Sodelovalno poučevanje v inkluzivnih razredih - Priročnik za sodelovalne pare*. Koper: e-priročnik, Koper: Univerza na Primorskem, Pedagoška fakulteta.

Komljanc, N. (2008). Razvoj didaktike ocenjevanja. V *Didaktika ocenjevanja*. ZRSŠ.

Krek, J., in Metljak, M. (2011). *Bela knjiga o vzgoji in izobraževanju v Republiki Sloveniji 2011*. Ljubljana: ZRSŠ.

Kukanja Gabrijelčič, M., in Gorela, K. (2018). *Nadarjenost na predšolski stopnji*. Koper: Založba UP.

McGuire, J. M., Scott, S. S., in Shaw, S. F. (2006). Universal Design and Its Applications in Educational Environments. *Remedial and Special Education*, *27*(3), 166–175.

Metzner, R. (1998). *The unfolding self*. Novato, CA: Origin Press

Peterson, K., DeCato, L., in Kolb, D. A. (2015). Moving and learning: Expanding style and increasing flexibility. *Journal of Experiential Education*, *38*(3), 228–244.

Plešec Gasparič, R. in Valenčič Zuljan, M. (2019). Učne oblike v osnovni šoli in obrnjeno učenje in poučevanje. *Revija za elementarno izobraževanje, 12*(3). *str. 267–290.*

Renzulli, J. S. (2016). The Three-Ring Conception of Giftednes: A Developmental Model for Promoting Creative Productivity. V S. M. Reis (ur.) (2005), *Reflections On Gifted*. Education (str. 55–86). Waco (Texas): Prufrock Press.

Rose, C. in Goll, L., (1993). Umetnost učenja, Ljubljana: Tangram.

Rose, D. H., in Meyer, A. (2002). *Teaching every student in the digital age: Universal design for learning.* Association for Supervision and Curriculum Development, 1703 N. Beauregard St., Alexandria, VA 22311–1714

Shearer, C. B., in Karanian, J. M. (2017). The neuroscience of intelligence: Empirical support for the theory of multiple intelligences? *Trends in Neuroscience and Education, 2017*(6), 211–223.

Stuntzner, S., in Hartley, M. (2015). Balancing self-compassion with self-advocacy: A new approach for persons with disabilities learning to self-advocate. *Annals of Psychotherapy & Integrative Health*, 12–28.

Story, M. F., Mueller, J. L., in Mace, R. L. (1998). *The Universal Design File: Designing for People of All Ages and Abilities*. Raleigh, NC: NC State University, the Center for Universal Design.

Thousand, J. R. (2007). *Differentiating Instruction: Collaborative Planning and Teaching for Universally Designed Learning.* En J. R. Thousand. Corwing Press.

Tolimson, C. A. (2003). *Fulfilling the promise of the differentiated classroom strategies and tools for responsive teaching.* Alexandria, Virginia, United States: ASCD.

Wiliam, D. (2006). Formative assessment: Getting the focus right. *Educational assessment*, *11*(3–4), 283–289.

Avtorici:

Dr. Vanja Riccarda Kiswarday
Izredna profesorica, Univerza na Primorskem, Pedagoška fakulteta, Cankarjeva 5, 6000 Koper, Slovenija, e-pošta: vanjariccarda.kiswarday@upr.si
Assocciate Professor, University of Primorska, Faculty of Education, Cankarjeva 5, 6000 Koper, Slovenia, e-mail: vanjariccarda.kiswarday@upr.si

Andreja Cerovšek, mag. prof. inkluzivne pedagogike
Profesorica inkluzivne pedagogike, Osnovna šola Grm Novo mesto, Trdinova ulica 7, 8000 Novo mesto, Slovenija, e-pošta: andreja.cerovsek@guest.arnes.si
Professor of inclusive pedagogy, Elementary School Grm, Novo mesto, Trdinova ulica 7, 8000 Novo mesto, Slovenia, e-mail: andreja.cerovsek@guest.arnes.si

Students' Perceptions of Peer Feedback in Lower Elementary School Grades

Marija Sablić[1], Ana Mirosavljević[2] & Ana Maria Marinac[1]

[1] J. J. Strossmayer University of Osijek, Faculty of Humanities and Social Sciences, Osijek, Croatia
[2] University of Slavonski Brod, Slavonski Brod, Croatia

Corresponding author/Korespondenčni avtor
amirosavljevic@unisb.hr

Abstract/Izvleček

This paper presents the results of a study conducted on seventeen first- to fourth-grade elementary school students, the aim of which was to examine the students' perceptions and assessments of the importance of peer feedback and the ways in which peer feedback is carried out. This paper emphasizes the need to raise awareness of the basic skills that are necessary for effective peer feedback – the development of critical thinking, evaluation, observation skills, communication skills, the development of empathy, self-confidence, and the development of respect for others.

Dojemanje vrstniških povratnih informacij učencev v nižjih razredih osnovne šole

V prispevku so predstavljeni rezultati raziskave, izvedene s sedemnajstimi učenci, in sicer od prvega do četrtega razreda osnovne šole. Cilj je bil preveriti dojemanje in ocene učencev o pomenu vrstniške povratne informacije in načinih izvajanja vrstniške povratne informacije. V prispevku je poudarjena potreba po ozaveščanju osnovnih veščin, ki so potrebne za učinkovito povratno informacijo vrstnikov – razvoj kritičnega mišljenja, vrednotenja, sposobnosti opazovanja, komunikacijskih veščin, razvoj empatije, samozavesti, razvoj spoštovanja do drugih.

University of Maribor Press

Introduction

Today, the development of self-observation and evaluation skills is crucial and is closely tied to peer feedback. Creating conducive conditions for students to reach their potential and educational goals involves regular monitoring and feedback (Šalković et al., 2018), which is considered the basic purpose of evaluation. Feedback is a means of reviewing students' work (either individual tasks or the learning process) with the intention of improving the achievement of educational outcomes during the learning process (Jurjević Jovanović et al., 2022). Teachers indirectly aid this development by providing feedback and serving as role models (Orlich et al., 2010). During self-evaluation, students identify their competences and set achievable goals. Teachers play a pivotal role in guiding this process. Research indicates students tend to rate peers' skills higher than teachers do (Šalković, et al., 2018; Staubitz et al., 2016), thus highlighting challenges such as accuracy, sincerity, and favouritism. Many students fear evaluation and struggle to use negative feedback constructively. In practice, teachers in Croatia often use affirmative methods to mitigate negative feedback effects.

The question arises whether the educational system, by emphasizing affirmative feedback, may inadvertently hinder the preparation of young people to face both the positive and negative aspects of their work in society. Patchan et al. (2017) examined peer feedback depth, suggesting it be observed through three responsibility components: assessment, feedback, and a combination of both. They emphasize the importance of objective peer feedback, aligning with the fundamental value of responsibility in society. Teaching should cultivate responsible individuals and society. During self-evaluation or peer feedback, students should understand the purpose of evaluation and its connection to responsibility towards oneself, others, and society. Encouraging students to view "negative feedback" as a catalyst for positive change is vital for academic growth.

Panadero et al. (2016) outline two effective approaches to peer feedback. The first involves evaluating a specific piece of student work, providing concrete advice for improvement, along with praise or constructive criticism. This approach teaches students to recognize both the strengths of their work and areas for improvement, while fostering a growth mindset. The second approach involves evaluating one's own work and that of peers, considering individual achievements and potential areas for growth.

This encourages students to analyse abilities and potential within given contexts, promoting realistic expectations and discouraging unfounded comparisons.

Adachi et al. (2017) suggest that peer feedback contributes significantly to students' development and their ability to think critically. Chen et al. (2021) offer insightful findings regarding the preparation of students for peer feedback. They note that 47% of survey participants will provide fair assessments only if they believe others will do the same, while only 34% believe other students will make fair assessments. Understanding students' attitudes towards mutual evaluation is crucial. While 63% feel comfortable evaluating peers, 18% feel unsure about the process, and 17% find negative feedback from peers distressing. Despite challenges, 82% of students view peer feedback through digital tools as an impartial method beneficial to their learning.

Improperly guided peer feedback can lead to detrimental outcomes such as mistrust, competition, discomfort, and anxiety (Levine et al., 2010; Lerchenfeldt et al., 2023). Therefore, it is vital for teachers to understand the purpose of peer feedback and ensure its proper direction, along with objective evaluation of students. Peer feedback fosters mutual responsibility, which is crucial for student autonomy and academic development, benefiting both students and teachers (Serrano-Aguilera et al., 2021). It promotes individual responsibility and motivation, enhances group work dynamics, and cultivates problem-solving and metacognitive skills (Lerchenfeldt et al., 2023). Ultimately, peer feedback plays a significant role in shaping students' learning experiences, guiding their future actions, and providing valuable insights for teachers to improve their teaching approaches.

Evaluation in the Croatian Educational System

Evaluation is fundamental to student education in Croatian elementary schools. Modern teaching methods prioritise student-centred learning, where students engage in research, problem-solving, reflection, and self-evaluation, with teachers serving as mentors (Matošević, 2020). Recently, evaluation has shifted away from traditional summative assessments towards a focus on providing high-quality feedback to enhance student learning and academic performance.

Evaluation typically involves providing feedback or assessing students' knowledge and skills, categorized as summative or formative. Summative evaluation occurs at the end of the learning process and assesses learning outcomes.

In contrast, formative evaluation takes place during the learning process and provides specific feedback to guide students towards desired outcomes (Orlich et al., 2010).

In Croatian elementary schools, evaluation aligns with subject curricula, with a primary focus on enhancing student learning skills and performance (Jurjević Janković et al., 2022). The evaluation process begins with planning the teaching process and defining educational outcomes, followed by planning the evaluation itself. Evaluation is structured around three areas: evaluation for learning, evaluation as learning, and evaluation of learning outcomes. Methods and activities for teaching are selected next, with continuous evaluation occurring during class implementation. The teaching process concludes with reflection, where teachers analyse outcomes, content, activities, and student engagement (Jurjević Jovanović et al., 2020). The choice of evaluation type depends on the specific goals and content being evaluated (Brajković and Žokalj, 2021).

Methodology

The Aim and Research Questions

The aim of this qualitative research is to examine the perceptions and evaluations among grade students of the importance and methods of conducting peer feedback. In other words, to determine from the student perspective the ways and frequency of conducting peer feedback in the teaching process, as well as its purposefulness and usefulness in work. In accordance with this aim, two research questions were posed:

1. Which strategies are used to encourage and facilitate mutual feedback among students in class?
2. Do students value giving feedback to their peers as a contribution to their progress?

Context of the Study and Participants

Elementary school education in the Republic of Croatia is free and compulsory, beginning with enrolment in the first grade and lasting eight years, from the age of six to fifteen. Class teaching / single-teacher education characterises the first four grades of elementary school, and subject teaching occupies the fifth through eighth grades. High school education, which in Croatia lasts three to five years and is not

compulsory, enables students to acquire knowledge and skills for work and/or further education. The classes in schools are organized in two shifts (morning and afternoon).

The research was conducted in a school with combined classes. In the Republic of Croatia, a combined class comprising students from two grades from the first to fourth grade has a maximum of sixteen students. The said school is in a rural area of the eastern region of the Republic of Croatia and has 322 students in four one-teacher classes and ten subject-teacher classes. The sample for this research was chosen intentionally since it encompasses two grades from the same school with a smaller number of students. The research was conducted in the main school (13 students) and a branch school in a nearby village (4 students). A total of 4 classes (1st to 4th grade) were included, from a combined class department in the main school, and another combined class in the branch school. The combined class in the main school included 3rd- and 4th-grade students, while the combined class in the branch school included 1st- and 2nd-grade students. A total of 17 students participated in the research, and it is important to emphasize that these were students whose parents had signed written consent for their participation in the research. Thus, the criterion for the selection of the sample was exclusively the voluntary participation of students, which implies the inclusion of all students regardless of academic success.

Research Instrument

The research was conducted using standardised, open-ended interviews in which the order of questions and the way questions are asked are predetermined (Patton, 2015). The presence of the researcher who monitored the process is also important because, in qualitative research, the researcher is a key instrument (Yin, 2016). The interview questions were constructed and designed for our research purposes. According to Patton (2015), this type of qualitative interview "consists of a set of questions carefully worded and arranged with the intention of taking each respondent through the same sequence and asking each respondent the same questions with essentially the same words" (p. 645). Each participant was given the opportunity to respond in their own words, and no pre-written responses were offered (Patton, 2015). The interviews contained several questions, some of which related to peer feedback. Here are several questions the answers to which are included in this article:

1. What does the term peer feedback mean?

2. Do you give feedback to your friends on their work/accomplished tasks? How often?

3. Does the teacher encourage peer feedback in your class and in what way? Please describe the process.

4. Does it help you in your own progress when you analyse other students' works? Does it motivate you to learn? What are the results of your learning and work?

5. Do you often reflect on your work, and how do you evaluate your own work?

The interview was conducted with students on one occasion, in October 2023. The video recordings and transcripts of the interviews remain stored on the researchers' computer and are available to the reader upon request.

Ethical Considerations

Before conducting the research, participants were acquainted with its aim and purpose. Written consent for interviewing the children was obtained from the school principal as well as the children's parents. The children's names remained anonymous to ensure the privacy and confidentiality of the data. Labels were used instead of names to distinguish each research participant. The mentioning of the name of the institution in which the study was conducted was avoided. Because of the anonymity of the data, the interviews with the children are not available on public channels nor anywhere online.

Data Collection and Analysis

The data were coded using the open coding method, where the codes obtained were grouped into categories according to thematic criteria (Creswell, 2012). Each thematic chapter consists of brief descriptions of the participant's responses and the area background data. The coding was done "manually" by the researcher, without the use of a qualitative data analysis program. One person coded the data, and the other two researchers were responsible for validating the coded data from the interviews. The researchers discussed the coding scheme with each other, comparing and discussing similarities and differences. They analysed the relationship between the data and the classification system to verify the meaningfulness and accuracy of

the categories and the inclusion of data in the categories. As Patton (2015) notes, the categories were judged according to the criteria of internal homogeneity (the extent to which the data in each category are related in a meaningful way) and external heterogeneity (the extent to which the differences between categories are clear). The research questions were used to interpret the research results. However, the data analysis itself is presented thematically, i.e., it involves categorising data into a series of descriptive categories (Braun and Clarke, 2006). Considering that the entire study was focused on a constructivist paradigm in which the researcher, as the most important instrument in data collection, aims to understand and interpret individual statements and visions of the research participants, the researchers relied on the criteria of credibility and internal validity, which refer to the existence of trust in the results and interpretations of the studies. Thereby, the researchers used peer debriefing (mutual presentation and comparison of researchers' results about their understanding of the teacher's statements and visions, intended to prevent bias), and thick data descriptions (providing enough information) (Lincoln and Guba, 2013).

Results

The qualitative analysis of the data was followed by the coding of the data, which resulted in six categories: *The concept of peer feedback; Methods of peer feedback; Peer feedback outside of school; Teacher's role; The purpose of peer feedback; Self-evaluation.*

The Concept of Peer Feedback
Peer feedback is a process in which students provide each other with feedback on a completed task or learning process. For students, peer feedback often presents an opportunity to exchange opinions with other students, which helps improve their knowledge and skills. According to the students' answers, peer feedback was observed in helping other students develop their competences. It is important to note that peer feedback connects students and helps them develop critical thinking and expression. Most importantly, peer feedback can play a significant role in the students' development of self-confidence, social competences, collaborative competences, and responsibility toward oneself and others.

"*Well… when you help someone, I mean, when you… tell someone what they did right and what they did wrong.*" (Student 3)

"*Well… when we evaluate each other, when we help each other, when we look in each other's notebooks, and stuff like that.*" (Student 7)

"When we tell someone what they did good and what they did bad." (Student 9)

"Feedback is when we exchange notebooks and when we give each other grades." (Student 10)

"Feedback is… well, for me it means when I want to explain something to someone so that they do better in school, get better grades, when the teacher can explain something well to them, and when I can simply help someone to... to have a better final grade than me." (Student 14)

Methods of Peer Feedback

In the teaching process, peer feedback can be conducted in various ways: orally, in writing, or with the help of digital tools. Our research participants confirm this, with a focus being on spotting and correcting mistakes. Peer feedback contributes to the development of classroom cohesion and allows students to evaluate each other in a supportive manner, which is the main purpose of feedback, together with the aim of individual and communal progress. Additionally, through an active evaluation process, students improve their own work and learning processes.

"We exchange notebooks and look at the mistakes. ... Well… no, I don't know… maybe in Science class." (Student 2)

"Well, sometimes we have to write it, and sometimes it's on the smart board. … Well, mostly at school, in Math, so that we can all do better. In all the classes, writing, multiplication table… to learn better… well, that was in Art class, we were painting and I made everything blue, so it didn't look so good, but it was good in the end. To change that." (Student 6)

"For example, in Croatian, when we were looking at notebooks… ours… let's say, I give mine to Noa, and he gives me his, so we go through each other's notebooks… We talked about it and wrote about it, but mostly talked about it. … Yes, every time during Art class. … To share what you really think and feel, if it's good or not, to say what you really think." (Student 7)

"Well, sometimes we talked about it and wrote about it, and sometimes it was on the smart board." (Student 8)

"Mostly in Art class. … When we are in front of the board and give feedback to each other . . . We speak about it mostly." (Student 11)

"Because we insult each other… We laugh at others. … We speak about it." (Student 12)

Peer Feedback Outside of School

Peer feedback is a process that students can also apply during play or joint activities outside school. The use of peer feedback outside school signifies that peer feedback is important to students.

"Well, when I was at my friend's house, we ran and commented on each other's work." (Student 2)

"Well, we talk both at school and outside of school. ... Well, while we walk back home. About grades, this and that, about our topics. Children's topics." (Student 7)

"My friend and I walk home and talk about how we did certain things at school." (Student 12)

"When me and my friend Lana are playing or walking, we both say how something could go, how we could do something new in school…" (Student 14)

Teacher's Role

The teacher's role in the process of peer feedback is crucial. The teacher is a guide and moderator – they teach students how to evaluate others and how to give feedback. During peer feedback, it is important that the teacher be present and focused on student presentations so that peer feedback does not turn into insults and belittling, as stated by one of the interviewed students.

"Well, mostly at school, in Math, so that we can all do better. In all the classes, writing, multiplication table… To learn better. … Well, she uses it every day to make us angry, to teach us as best as possible. To get us to fifth grade." (Student 6)

"We need to, we need to be honest." (Student 8)

"We need to say what they did wrong and what they need to correct." (Student 12)

"Well, if the teacher says we need to help someone if they don't know how to do a task, and if the teacher has to correct someone, I'll help someone else to correct it." (Student 17)

The Purpose of Peer Feedback

Peer feedback has multiple roles, and the teacher's task is to convey these roles to students in order to achieve the desired outcomes of the evaluation process. These roles include the improvement of learning, development of self-confidence, encouragement of active learning, development of empathy, collaborative learning, better classroom cohesion, and development of responsibility towards learning. However, the purpose of peer feedback differs for each student.

"A better grade. … To get a better grade." (Student 4)

"Well, it's not a problem for me if someone tells me that I need to add something, because I tell them too, it's not a problem. It doesn't happen often, but it helps me. … We encourage others… Yes. It helps me. Then I know what someone did wrong, so I won't do the same as them. … Well… Yes. I know what I need to learn." (Student 6)

"Well, they help me, they help me more than they think." (Student 7)

"To see which mistakes we make and to how to do better the next time." (Student 12)

"They help me because I can… for example, if Lana explains something to me now, I remember it immediately and do it in some exam or paper." (Student 14)

Self-Evaluation

During peer feedback, students often reflect on their own work or learning. In this way, it is possible to influence the personal development of students, to develop their awareness of different possibilities and perspectives, their skill at setting realistic goals, critical thinking, and responsibility for one's learning and achievements. Generally, in the process of self-evaluation, students think about how they can improve.

"And… (pause). Well, when I'm doing something and I look at something and remember what else I could change in my work." (Student 3)

"Ah… I don't know, I think so. I look at what I can do better and then I do it." (Student 6)

"Well, sometimes. … Well... I don't know. I think about what I can do better." (Student 8)

"Yes, all the time. … Well, I take a look to see if I made a mistake and what I can do better." (Student 12)

"Well, I think about what I can do better or at all, what the mistakes are and so on." (Student 17)

Discussion

Analysis of the students' responses revealed that the students mainly perceive peer feedback as helping others to improve their own learning or work and thereby obtain better grades. These attitudes pave the way towards building an active and supportive classroom community. Lloyd et al. (2016) indicate similar conclusions based on their research that shows how peer feedback plays an important role in building classroom community and communication between students. Furthermore, according to the students' answers, one can determine that they often consider the grade, and not knowledge, as the aim of learning, and thus of peer feedback.

It is necessary to understand that these results do not represent general data that can be applied to all students in the Republic of Croatia. In other words, these results cannot be used as a general conclusion. However, the data can be used as a basis for future research and as a way to understand students' perception and the value attributed to them by conducting peer evaluation. Based on these results and the students' answers, one can conclude that peer feedback can be implemented in various ways and with different subjects. Students mostly highlight Art, Science, foreign languages, and Math classes. Students understand that the aim of peer feedback is the progress of each of them, so that their achievement is even greater.

Peer feedback is sometimes done with the help of technology – the use of smart boards in class. It should be said that digital tools are mentioned in one of the two combined classes since not all classrooms are similarly equipped, and some lack smart boards. Some of the practical methods that can be found in students' responses include the exchange of notebooks and correction of mistakes; students' oral feedback on what was done well and what needs to be improved, and peer feedback through a smart board.

In their research on the effectiveness of peer feedback, Panadero et al. (2016) indicate two approaches: evaluating work solely on the basis of achievement, and evaluating one's own work. The authors especially note the importance of affirmative feedback, whereby it is necessary to emphasize what is good and to highlight in an encouraging way what needs to be improved. The students who participated in this study showed that affirmative feedback, which improves their approach to learning and work without making them feel incompetent, is very important to them. In the study by Šalković et al. (2018), students often rate other students' work more highly than the teachers do. This research also confirms that affirmative feedback is very important to students, so they provide this kind of information to their classmates; however, it is important to note that students' peer evaluations tend to be overly positive compared to objective assessments of performance. This discrepancy between peer feedback and objective reality suggests that while students value supportive communication, they may struggle with providing constructively critical feedback that accurately reflects areas needing improvement. Hence, it must be noted that peer feedback is a process that should be gradually adopted and learned, while simultaneously developing critical thinking skills (Adachi et al., 2017). Similar conclusions are found in Chang and Wongwatkit (2023), who assert that peer feedback significantly improves learning achievements, increases motivation, and at the same time improves cooperation, communication, and critical thinking. Our research has shown that students discuss their work and learning even outside school, during play or other free-time activities. This underlines the importance of early teaching of peer evaluation.

With the right approach, students will have multiple benefits from peer feedback, not only in school, but also beyond it. Serrano-Aguilera et al. (2021) indicate that peer feedback and the development of skills required for peer feedback affect individual responsibility towards work as well as responsibility towards oneself and others. Similar conclusions can be made in the case of students who participated in this research.

Xue et al. (2023) conducted research aimed at gaining insight into whether peer feedback affects students' literary abilities and concluded that peer feedback positively affects the overall quality of writing. Students who carried out peer feedback showed better results in poetic expression; therefore, it can be concluded that their creativity was also encouraged. Peer feedback had a particularly positive impact on students with better prior knowledge and achievements. Furthermore, Wijnia et al. (2022) determine that information received in peer feedback contributes to students' sense of autonomy and competence. That is, according to the students, feedback that includes a complete answer and explanations truly contributes to their educational values. The students' answers indicate that they consider feedback from their peers to be important. The validity of this is evidenced by the answers, which show that students implement feedback and peer evaluation even when not in school.

The responses show that teachers did point out to the students that the purpose of peer feedback is to help others, and that the aim is for each student to achieve a better result. Chen et al. (2021) come to similar conclusions and point out that most students have a positive attitude towards peer feedback. Moreover, the students highlight the necessary qualities of the person providing feedback – sincerity, concern for the other person's feelings, and so on, which can also develop students' empathy. Staubitz et al. (2016) and Patchan et al. (2017) conclude that frequent challenges in the process of peer feedback are accuracy and sincerity during feedback, that is, student impartiality. In connection to that, the results of the research conducted by Chen et al. (2021) indicate that most students will evaluate objectively only if they feel that other students also evaluate objectively, while only 34% of students believe that other students do so. Additionally, the teacher's role and the importance of a guided peer feedback process is also evident from research results, which indicate that non-objective feedback can lead to a sense of competition between students and can damage their interpersonal relationships (Levine et al., 2010). Likewise, it can also contribute to the development of discomfort or anxiety (Lerchendeldt et al., 2023). Therefore, it is key to emphasize that it is necessary to constantly reflect on and improve the process of peer feedback so that students are truly encouraged by it and feel that the process fosters their progress.

Students indicate that peer feedback motivates them to study and helps them with their own work. They perceive feedback from other students as useful, as well as giving feedback to other students, both for the benefit of others and for their own

work. All students note that they can improve their learning with the help of peer feedback, and most students often carry out a self-evaluation process, that is, they reflect on what they did well and what they still need to work on to improve it. Panadero et al. (2016) highlight self-evaluation as one of the effective approaches but specify the prerequisites for a successful and effective approach to self-evaluation. It is necessary to make students aware of the differences in peer capabilities, with a special attitude to themselves and the analysis of their own capabilities. Therefore, peer feedback can be carried out together with self-evaluation in such a way that students are guided by their own and others' capabilities, and that they evaluate specific tasks based on this. Cheong et al. (2023) conducted research with students on how self-evaluation and peer feedback can mutually help students reach several important conclusions: self-evaluation is effective even when peer feedback is conducted because it complements peer feedback, owing to differences in student thinking, and it is interesting to note that self-evaluation works effectively on students with both high and low achievements. It can be concluded that peer feedback contributes to the development of self-image, self-confidence, critical thinking, self-confidence, and so on.

Our research results show that peer feedback forms an important part of the teaching process from the student's perspective. The teacher has a key role in laying out the foundations for the peer feedback process, and in developing the necessary skills so that students can evaluate themselves and other students. Since the school also has a role in forming character, during the process of peer feedback, it is possible to touch on numerous issues that will, with a proper approach, result in the development of positive traits and achievements.

Conclusion

The evaluation of students in elementary school is a ubiquitous and increasingly studied topic among counsellors, teachers, scientists, and other educational experts. Since evaluation is an indispensable part of student education over its entire duration, teachers of lower grades of elementary school have a special task in laying the foundations for and developing the basic knowledge and skills of students regarding evaluation. The modern approach to education places the student at the centre of the process, whereby they are trained to look for solutions, while evaluating themselves, their work, and others in their environment. In recent years, within the

Croatian educational system, the true purpose of evaluation has often been discussed and is often located in feedback that will help students achieve better results and their full potential. In the learning process, other students, peers whom the students trust and who go through similar challenges and perform similar tasks, play an important role. In this light, it is vital to discuss the importance of peer feedback.

Peer feedback can be encouraged by diverse methods, the most prevalent being the conversation method, the oral presentation method, or the writing method (correcting of work by other students). Methods supported by digital tools are used somewhat less often, with a smart board being used most often. By encouraging peer feedback, teachers also encourage fundamental values such as sincerity, empathy, and responsibility. Students perceive peer feedback as helping others to improve their own knowledge or work, and they benefit greatly from the feedback they receive from their peers.

The contribution of this research is reflected in its emphasis on the importance of the process of peer feedback, and thus of self-evaluation. A further contribution is its identification of the fundamental skills necessary for effective peer feedback, and what is achieved through peer feedback: the development of critical thinking, evaluation, observation skills, communication skills, the development of empathy, self-confidence and self-esteem, along with the development of respect towards others and other people's opinions. The contribution also emphasises the role of teachers in the peer feedback process. This research can be used as the basis for further consideration of how to improve peer feedback in the teaching process and what teacher competences are needed for guiding peer feedback towards purposeful and effective evaluation.

Research Limitations

Limitations of this research include the subjective assessments of students. However, it is crucial to note that the opinion of each student is important. Another limitation might be the presence of the teacher in the room during the interviews with the students, whereby the students were more reticent in the beginning. Since this is qualitative research, another limitation of the study might be the small sample as well as the fact that it was conducted at one point in time. Since the research was conducted in only one Croatian school, further research should increase the sample

size, and the results from this research should not be generalized, but rather serve as a basis for future research and provide insight into students' reflections and experiences regarding peer evaluation.

References

Adachi, C., Tai, J. H.-M., & Dawson, P. (2017). Academics' perceptions of the benefits and challenges of self and peer assessment in higher education. *Assessment and Evaluation in Higher Education, 43*(2), 294–306.

Brajković, S., & Žokalj, G. (2021). *Učenje u tijeku – kako formativnim vrednovanjem potaknuti učenje [Learning in progress: how to stimulate learning through formative assessment]*. Alfa.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology 3*(2), 77–101.

Chang S.-C., & Wongwatkit, C. (2023). Effects of a peer assessment-based scrum project learning system on computer programming's learning motivation, collaboration, communication, critical thinking, and cognitive load. *Education and Information Technologies, 8*(24), 1–24. https://doi.org/10.1007/s10639-023-12084-x.

Chen, J., Li, J., Jiang, H., Yu, J., Wang, H., Wang, N., Chen, S., Mo, W., Wang, P., Tanguay, R. L., Dong, Q., & Huang, C. (2021). Developmental co-exposure of TBBPA and titanium dioxide nanoparticle induced behavioral deficits in larval zebrafish. *Ecotoxicology and environmental safety, 215*, 112176. https://doi.org/10.1016/j.ecoenv.2021.112176

Cheong, C. M., Luo, N., Zhu, X., Lu, Q., & Wei, W. (2023). Self-assessment complements peer assessment for undergraduate students in an academic writing task. *Assessment & Evaluation in Higher Education, 48*(1), 135-148. https://doi.org/10.1080/02602938.2022.2069225.

Creswell, J. W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research.* Pearson.

Jurjević Jovanović, I., Rukljač, I., & Viher, J. (2020). *Vrednovanje u razrednoj nastavi [Evaluation in classroom teaching]*. Školska knjiga [Schoolbook].

Jurjević Jovanović, I., Rukljač, I., & Viher, J. (2022). *Vrednovati je lako [Evaluating is easy]*. Školska knjiga [Schoolbook].

Lerchenfeldt, S., Kamel-ElSayed, S., Patino, G., Loftus, S., & Thomas, D. M. (2023). A Qualitative Analysis on the Effectiveness of Peer Feedback in Team-Based Learning. *Medical Science Educator, 33*(1), 893–902.

Levine, S. C., Suriyakham, L. W., Rowe, M. L., Huttenlocher, J., & Gunderson, E. A. (2010). What counts in the development of young children's number knowledge? *Developmental Psychology, 46*(5), 1309–1319.

Lincoln, Y. S., & Guba, E. G. (2013). *The Constructivist Credo.* Routledge.

Lloyd, B. P., Weaver, E. S., & Staubitz, J. L. (2016). A Review of Functional Analysis Methods Conducted in Public School Classroom Settings. *Journal of Behavioral Education 25*(3), 1–24. https://doi.org/10.1007/s10864-015-9243-y.

Matošević, A. (2020). *Vrednovanje u sklopu programa škola za život: istraživanje zadovoljstva nastavnika [The Aspect of Assessment in the School for Life Program: Teacher Satisfaction Research]*. (186:415746), [Master's thesis, University of Rijeka, Faculty of Humanities and Social Sciences]. https://urn.nsk.hr/urn:nbn:hr:186:415746

Orlich, D., Harder, R., Callahan, R., Trevisian, M., & Brown, A. (2010). *Teaching Strategies.* Cengage Learning.

Panadero, E., Brown, G. L., & Strijbos, J.-W. (2016). The future of student self-assessment: a review of known unknowns and potential directions. *Educational Psychology Review, 28*(1), 803–830. https://doi.org/10.1007/s10648-015-9350-2

Patchan, M. M., Schunn, C. D., & Clark, R. J. (2017). Accountability in peer assessment: examining the effects of reviewing grades on peer ratings and peer feedback. *Studies in Higher Education, 43*(12), 2263–2278.

Patton, M. Q. (2015). *Qualitative Evaluation and Research Methods*. Sage.

Serrano-Aguilera, J. J., Tocino, A., Fortes, S., Martín, C., Mercadé-Melé, P., Moreno-Sáez, R., Muñoz, A., Palomo-Hierro, S., & Torres, A. (2021). Using peer review for student performance enhancement: Experiences in a multidisciplinary higher education setting. *Education Sciences, 11*(2), 71–92.

Staubitz, T., Petrick, D., Bauer, M., Renz, J., & Meinel, C. (2016). Improving the peer assessment experience on MOOC platforms. *Association for Computing Machinery, 10*(16), 389–398. https://doi.org/10.1145/2876034.2876043

Šalković, S., Žiljak, V., & Sikirica, N. (2018). Samovrednovanje i ocjenjivanje korištenjem web tehnologija [Self-evaluation and grading by using web technology]. *Polytechnic & Design, 6*(3), 199–206.

Wijnia, L., Giel, L. I. S., & Noordzij, G. (2022). *The role of psychology students' motivational profiles in a problem-based learning curriculum*. Paper presented at the American Educational Research Association. https://doi.org/10.3102/1894007

Xue, S., Xue, X., Son, Y. J., Jiang, Y., Zhou, H., & Chen, S. (2023). A data-driven multidimensional assessment model for English listening and speaking courses in higher education. *Language, Culture and Diversity, 8*(1), 1-11. https://doi.org/10.3389/feduc.2023.1198709

Yin, R. K. (2016). *Qualitative Research from Start to Finish, Second Edition*. The Guilford Press.

Authors:

Marija Sablić, PhD
Full Professor, Department for Pedagogy, Faculty of Humanities and Social Sciences, J. J. Strossmayer University of Osijek, Lorenza Jägera 9, 31000 Osijek, Croatia, e-mail: marija.sablic10@gmail.com
Redna profesorica, Oddelek za pedagogiko, Fakulteta za humanistične in družbene vede, Univerza J. J. Strossmayerja v Osijeku, Lorenza Jägera 9, 31000 Osijek, Hrvaška, e-pošta: marija.sablic10@gmail.com

Ana Mirosavljević, PhD
Assistant Professor, Department of Social Sciences and Humanities, University of Slavonski Brod, Gundulićeva 20, 35000 Slavonski Brod, Croatia, e-mail: amirosavljevic@unisb.hr
Docentka, Oddelek za družbene in humanistične vede, Univerza v Slavonskem Brodu, Gundulićeva 20, 35000 Slavonski Brod, Hrvaška, e-pošta: amirosavljevic@unisb.hr

Ana Maria Marinac, mag. prim. educ.
Doctoral Researcher at Doctoral Study Programme Pedagogy and Contemporary School Culture
Doctoral Study Programme Pedagogy and Contemporary School Culture, Faculty of Humanities and Social Sciences, Lorenza Jägera 9, 31000 Osijek, Croatia, e-mail: marinac.anamaria98@gmail.com
Doktorska raziskovalka na doktorskem študijskem programu Pedagogika in sodobna šolska kultura
Doktorski študijski program Pedagogika in sodobna šolska kultura, Fakulteta za humanistične in družbene vede, Lorenza Jägera 9, 31000 Osijek, Hrvaška, e-pošta: marinac.anamaria98@gmail.com

Art Portfolios in Preschool Teachers' Initial Education as a Means of Acquiring Professional Competences and Reflective Practice

Marijana Župani Beni

Faculty of Teacher Education, Universtiy of Zagreb, Zagreb, Croatia

Corresponding author/Korespondenčni avtor
marijana.z.benic@gmail.com

Abstract/Izvleček
The study sought to examine the art portfolios of second-year undergraduate students of Early and Preschool Education at the Faculty of Teacher Education in Zagreb and their reflections on their own artwork. The aim was to examine how students experience, reflect on and interpret their creative work process. By reflecting, students acquire deeper understanding of art expression and perfect the ability to plan and evaluate visual art activities for implementation in their future work with children. The results show that students whose reflections on their own artwork through portfolios are more detailed show greater levels of self-awareness, creativity and pedagogical competence.

Umetniški portfelji v začetnem izobraževanju vzgojiteljev predšolskih otrok kot sredstvo pridobivanja strokovnih kompetenc in reflektivne prakse

V raziskavi smo preučevali umetniške portfelje študentov drugega letnika dodiplomskega študija zgodnjega in predšolskega izobraževanja na Pedagoški fakulteti v Zagrebu ter njihovo refleksijo o lastnih umetniških delih. Cilj je bil ugotoviti, kako študenti doživljajo, reflektirajo in interpretirajo proces svojega ustvarjalnega dela. Z refleksijo študenti pridobivajo globlje razumevanje likovnega izražanja ter izpopolnjujejo sposobnost načrtovanja in vrednotenja likovnih dejavnosti za izvajanje v prihodnjem delu z otroki. Rezultati kažejo, da študenti, katerih refleksije o lastnih umetniških delih v portfeljih so podrobnejše, izkazujejo višjo raven samozavedanja, ustvarjalnosti in pedagoških kompetenc.

University of Maribor Press

Introduction

Reflection and self-reflection play key roles in preschool teachers' professional development. Preschool teachers have the opportunity to continuously analyse and improve their pedagogical work via reflective practice, whereby they directly influence the quality of their own educational work with children of early and preschool age. Herzog, Bačlija Sušić and Županić Benić (2018) emphasized that deliberate reflection on the experiences acquired during initial education is key to preschool teachers' professional development, which is often regarded as a starting point in their professional education. However, in order for their professional competence (Visković and Višnjić Jevtić, 2019) to develop in accordance with societal changes and market needs, continuous participation in lifelong professional education is indispensable (Šagud, 2006). Professional competence entails formal permission to perform a task acquired through initial education, and an awareness that professional learning has just begun, which is the result of informal learning (Eraut, 2003). It is the fundamental competence for entering the profession. Preschool teachers' professional competences can be defined as a combination of expert competence acquired through education and their personal qualities (Visković and Višnjić Jevtić, 2019). In the context of implementing art activities with children of early and preschool age, Lindsay (2021) stressed that an enriched curriculum and a quality pedagogical approach to a child depend on the critical reflection and self-reflection of the preschool teacher. According to these authors, reflection is key to understanding and improving pedagogical practice and, with that, professional competences, especially in visual art education. Moreover, preschool teachers' reflection and self-reflection have a regulatory function because these provide the opportunity for them to recognize, analyse and improve their professional work in future educational projects (Šagud, 2006).

Reflection in the context of preschool teachers' professional work in the visual art domain
According to McArdle (2012), Probine (2016) and Richards and Terenni (2022), many preschool teachers feel inadequately prepared for implementing art activities, especially regarding the part of the curriculum that entails visual art. These studies point to the need for greater integration of art education in initial educational programmes for preschool teachers to strengthen their competence and self-confidence in the art domain. Garvis and Riek (2010) also stressed that preschool teachers who had quality art courses during their initial education feel competent to integrate art activities in every-day work with children.

M. Župánić Benić: Art Portfolios in Preschool Teachers' Initial Education as a Means of Acquiring Professional Competences and Reflective Practice

185

In their research, Day, Webster and Killen (2022) emphasized that integrating reflective practices into preschool teachers' initial education, will provide them the opportunity to become more efficient in educational work, especially in the art field, and to develop personal and professional competences in accordance with societal needs. Furthermore, Denee, Lindsay and Probine (2024) and Župánić Benić (2019) found that the level of preschool teachers' self-confidence in implementing art activities ensues directly from previous experiences in art education and the support provided by the institution, which leads to the conclusion that a preschool teacher who initially received quality art education feels competent to integrate art activities when working with children. The importance of reflection in the process of professional preschool teachers' development is underlined in Machost and Stains's study (2023). They emphasised the necessity of preschool teachers' being able to reflect on their experiences to understand the influence of their decisions on the child's development. Since the implementation of art activities in early and preschool education depends on preschool teachers' competences in the art domain, (Bačlija Sušić, Herzog and Župánić Benić, 2018), preschool teachers should have diverse understanding of art and experience with various art forms.

Approach to reflection via art portfolios

Art portfolios are used in initial education of preschool teachers to develop their competences and reflective practice from a beginner to an advanced level (Zupančić 2020). They are especially useful in art education, where they serve as an instrument for the assessment of art achievement and documentation of student work and progress over time (Doren and Millington 2019; Moon, 2013; Barrett, 2007; Boughton, 2004, acc. to Zupančić 2020). *"It is a tool for the teacher's planning, communication, reflection and evaluation."* (Novotná, 2024, p. 171).

Reflection within the portfolios helps students explain the creative process, choice of materials and techniques, and decisions that influenced the final product. Apart from describing technical elements, reflection entails the emotional and conceptual aspects of creation, intrinsic motivation and the challenges students faced in the creative process. Art portfolios can take different forms – from essays, notes, sketches to video journals – as long as they provide deeper insight into one's own art activity. Through portfolios, students develop the ability to articulate the development of an art project, they present their own works of art and develop critical thinking and communication skills through discussion about the works (Bhika, Francis and Miller, 2013).

Students should be required to reflect if they are to become reflective practitioners (Doren and Millington, 2019). Schön (1987) described *reflection in action* as a natural component of art practice, in which decisions are made amid creation. When students are expected to subsequently reflect on their work and notice patterns and trends, they develop strategies for making future decisions "in action" (Schön, 1987, acc. to Doren and Millington, 2019). Therefore, reflection within portfolios should not be solely retrospective but also projective, which would empower students to set goals for future art projects. Art portfolios in the programmes of preschool teacher education provide opportunities for connecting one's own art expression with pedagogical practice. Portfolios do not serve only to assess achievement, but also motivate introspection, creative development and deeper understanding of pedagogical practice (Zupančić, 2020).

Methodology

Research method

This research was conducted via the mixed methods approach (Creswell and Plano Clark, 2018, 2023; Johnson and Onwuegbuzie, 2004), which integrates quantitative and qualitative methods in data analysis. In this study, the qualitative approach entailed the content analysis of students' art portfolios and their reflective notes. The quantitative component included data analysis, where percentages were used to present the distribution of full-time and part-time students' answers. The aim of the research was to examine how students perceive, reflect on and interpret their own creative process, and how this process contributes to their professional development.

With regards to the set aim, the following research questions were asked:

1. Is there a difference in the achievements of full-time and part-time students in the application of visual art techniques and aesthetic choices in the process of making a puppet?

2. Do full-time and part-time students differ in their perceptions of the creative challenge of the puppet-making process?

3. What is the full-time students' and part-time students' perception of the correlation between the competences acquired in the process of making a puppet and their future pedagogical work?

M. Župani Beni: *Art Portfolios in Preschool Teachers' Initial Education as a Means of Acquiring Professional Competences and Reflective Practice*

187

4. Are there differences in the implications (the examples of learned skills and experiences) for the planning and development of future projects between regular and part-time students?

Research sample

The study was conducted among second-year undergraduate students (N=144) of Early and Preschool Education at the Faculty of Teacher Education of the University of Zagreb in the academic year 2023/2024. The study involved full-time (N=80) and part-time students (N=64). It was conducted within the course *Visual Art Teaching Methodology 1,* which includes the practical part of teaching visual art. Students were required to make a stage puppet as well as describing and reflecting on their own creative work via art portfolios. This approach provides students with the opportunity to analyse their creative process and skills development in the visual art domain. The participant sample corresponds to the recommendations for qualitative research in educational contexts. It is a purposive sample (Mejovšek, 2008), which included full-time and part-time undergraduate students in their second year of study. This yielded a diversity of experiences and reflection.

Data collection

Data were collected via the analysis of students' portfolios, which encompassed the process of making a stage puppet and reflection in the form of a short essay. In the essay, students reflected on the creative process, challenges they faced, their plans and the connection between experience and practice, including future projects inspired by the work on this visual art task. The portfolios documented making the Javanese puppet (rod puppet), while the reflective notes entailed the thought process about the technical and aesthetic challenges and implications for future pedagogical work.

Data analysis

The method of content analysis was utilised (Mayring, 2022) to systematically examine students' reflections and identify the key patterns. This content analysis consists of two sub-analysis categories (Matijević, Bilić, and Opić, 2016).

The first sub-analysis category entailed content analysis based on the coding of visual data from the portfolios, which were divided as follows: (1) the use of visual art technique and (2) aesthetic choices. At the same time, this sub-analysis entailed textual data, which were grouped according to the defined themes: (3) creative challenge, (4) application of acquired knowledge in future work with children, and (5) inspiration (implications) for future projects.

The second sub-analysis entailed the content category, where the frequency of answers was measured, that is, the level of detail and depth in student answers was assessed to determine the correlation between the quality of their notes and the level of self-awareness, creativity and professional development. Differences between full-time and part-time students were also examined.

Results and discussion

The comparison of full-time and part-time students' achievements in the implementation of visual art techniques and aesthetic choices

Based on the classification of achievements suggested by Marzano (2006), the results presented in Table 1 can be interpreted via three levels of achievement: *satisfactory, good* and *excellent*. According to these categories, the analysis included the use of visual art techniques (technical execution) and aesthetic choices (the final puppet's appearance, face painting and costume).

Table1

Category	Full-time students (N=80)	Part-time students (N=64)
The use of visual art technique (puppet's technical execution)		
Satisfactory	13 (16.25%)	11 (17.19%)
Good	16 (20%)	17 (26.56%)
Excellent	54 (67.5%)	36 (56.25%)
Aesthetic choices – final appearance, painting the face, costume		
Satisfactory	13 (16.25%)	15 (23.44%)
Good	19 (23.75%)	13 (20.31%)
Excellent	48 (60%)	36 (56.25%)

M. Županić Benić: Art Portfolios in Preschool Teachers' Initial Education as a Means of Acquiring Professional Competences and Reflective Practice

189

Satisfactory: This level meant that a student had fulfilled the basic task requirements and shown minimal understanding of the topic. *Good:* This category included students who had a solid understanding of the content and were able to apply the acquired skills in various contexts. Their knowledge was beyond the basic, but there were still some areas that required additional development. *Excellent:* This level entailed students who exceeded expectations and showed a high level of competence and creativity. Their works were innovative and reflected a deep understanding of the topic, alongside the ability of critical thinking and problem solving (Marzano, 2006).

The results in Table 1 show the comparison of full-time (N=80) and part-time students (N=64) regarding the use of visual art techniques and aesthetic choices. It should be noted that part-time students take only 25% of the undergraduate courses. Full-time students achieved a higher percentage of excellence in visual art techniques (67,5%) and aesthetic choices (60%), in comparison to part-time students, who achieved the same in both categories (56.25%). Part-time students' overall results were lower in comparison to full-time students', which indicates the differences between the two groups. These results show that the limitations in the provision of learning opportunities caused by the decreased number of course lessons, can negatively affect students' creative development. Therefore, it is important to examine strategies for improving the educational outcomes of part-time students, especially in the context of additional support and available resources.

The creative challenge of the puppet making process

This theme encompasses the analysis of students' answers to the following evaluation questions: *"Briefly describe how you felt in the course of the project's implementation?"* and *"Do you feel that the chosen topic was inspiring?"* The answers to these questions provide insight into how students experienced the puppet making process, which was presented through portfolios with detailed descriptions and photographs of all creative phases, from the conceptual sketch to the result – a rod puppet. Analysis of the results indicates that the process presented a significant creative challenge for students, which motivated their innovative and personal growth (Sternberg, 1999). Regarding analysis of the answers, most full-time students reported positive emotions towards the theme itself and stated that the puppet making process was challenging, creative, inspiring, beautiful, fun, curiosity-provoking, imaginative, etc.

For example: *"It was really interesting, and I was motivated and involved in the work. I felt that the chosen theme was extremely inspiring because it allowed an individual approach to creating a character, and it also developed imagination."*

"*I felt creative and engaged. The theme was a challenge, but it was also inspiring because it demanded a combination of different materials and skills."* These results are in line with the findings of Collins and Amabile's study (1999), which emphasised that positive emotional experiences during creative processes significantly contribute to the development of creativity and innovativeness. However, 17.5% of full-time students provided no answer whatsoever, while 6.25% expressed negative emotions, considering the process of the puppet's creation stressful and demanding. One student said: *"While I was making the puppet, I was under great pressure and did not enjoy it. I simply did not like this task. It was complicated, and it took a lot of time to do it right."* These negative emotions, which some students recalled, correspond to the findings of Runco and Acar's (2012) study, which suggested that the creative process can cause anxiety, particularly when students feel overburdened by a task. Furthermore, a few students described a combination of positive and negative emotions: *"I felt nervous during some parts of the task's implementation because it was stressful and I was afraid I would make a mistake, but in the end, I enjoyed making the puppet. It is a special feeling to finish the puppet and look at it because you know how much time and effort you invested."* Part-time students provided more detailed answers in comparison to full-time students. Although they expressed mostly positive attitudes toward the task, their answers often reflected a mix of positive and negative emotions. For example, one student said: "*This project was a new experience, even though it was a bit stressful. It took a lot of time and effort, but the end result was motivating and interesting."* Similar experiences can be recognised in the following statement: *"The task pushed me into new spheres of creativity, for which I thought I had no competence, but I am very pleased with the final product. During the making, I felt focused, satisfied and encouraged. The theme was extremely inspiring and motivating."* The overlapping emotions of frustration and pleasure can be correlated to the insufficient number of lessons for part-time students; the lack of structure and support impedes the experience of positive emotions tied to creative work (Csikszentmihalyi, 1990). During most phases of the project, part-time students often found themselves in a situation where they relied exclusively on video instruction, whereas full-time students had access to continuous support from professors in their practical courses. This difference in the level of received support can significantly shape students' emotional experience, which influences their satisfaction and frustration during the

M. Županić Benić: *Art Portfolios in Preschool Teachers' Initial Education as a Means of Acquiring Professional Competences and Reflective Practice*

191

creative process. Feldman (2003) stresses that a lack of adequate support can lead to decreased motivation and increased anxiety, which additionally impedes the development of creativity and negatively influences the overall learning experience. Around 11% of the students did not provide answers to the evaluation questions, while 5% expressed negative emotions towards the task, stating they did not enjoy the process and would not repeat it. These results emphasise the need to provide support for students who face creative challenges because an inappropriate approach or the lack of one can result in negative experiences and decreased motivation for further work (Collins and Amabile 1999; Runco and Acar, 2012).

Correlation between acquired competences and future pedagogical work: students' perceptions of the task's usefulness

Within this theme, the correlation between acquired knowledge and skills for making a puppet and the future preschool teacher profession was analysed. The research focus was placed on the students' answers to this question: *"Do you find this task useful for your future work with children?"* Based on the collected data, it was noted that most full-time students' answers had the formal character of simple agreement, without additional explanation. Only a few students provided elaborated answers, such as: "*I think that children like these puppets, and I can certainly arouse their interest, so this know-how of making a puppet will come in handy."*

However, a point of concern is that as many as 42% of full-time students failed to provide an answer to this question. This result can be explained by the fact that second-year undergraduate students lack practical experience and therefore find it hard to project their own creative process onto future work with children. According to Schön's theory (1983), reflective learning plays a key role in gaining professional competences. Students who do not participate in practical situations have a hard time understanding how theories relate to real problem situations, so they cannot answer the question about how they would benefit from these skills in the future (Schön, 1983). Scientific studies, like the one by Gibbons and Borders (2010), confirm that practical experience is key to developing professional competences, where the importance of reflection and the application of acquired knowledge in real contexts are emphasised. Students without work experience have fewer opportunities to reflect because they lack the chance to analyse their work procedures.

On the other hand, reports from the part-time students differ significantly; only 10% failed to correlate their work on the task with their future profession. A considerable majority of the part-time students provided more in-depth and detailed answers, which can be explained by their work experience because they work alongside study, so they are involved in different institutions and educational activities. For example, one student pointed out, *"I think this is a great activity that would provide children with the opportunity to practice their motor abilities, develop creativity and think outside the box."* A similar opinion was given in the following answer: *"I think it would be difficult to implement this activity with children. However, they could participate in some parts of the creative process, such as colouring the face and hands, making the costume, etc."* Furthermore, *"This activity could be very useful and interesting for children. After making the puppet, children could create their own plays."* These opinions suggest that because of their practical engagement, part-time students can better understand and integrate acquired competences into their pedagogical approach. Studies such as Gibbons and Borders (2010) confirm this hypothesis, suggesting that a higher level of practical experience leads to deeper understanding of theoretical concepts and their application in educational work. The fact that children love playing with objects they have created and that such activities develop their haptic experiences is reported by Iezaki and Novotná (2022).

Implications for future projects

The final part of the analysis examined whether students, based on their new experience of making a puppet, thought about future projects and activities, and what they were inspired to do by the project itself. The analysis entailed answers to the following questions: *"What new ideas come to mind?"* and *"Do you plan on implementing a similar project, and what might this be?"* Full-time students' answers were simple, often without more detailed explanation or interpretation. For example, some of them emphasised the desire to make additional puppets or create a puppet play, as shown in this answer: *"In the course of making the puppet, I had new ideas for similar puppets and making costumes and scenography to perform a complete play."* Others suggested activities such as reading picture-books and using puppets or performing a play with children: *"I would read a picture-book to children and act with the help of puppets or create a play with children and allow them to use puppets to act."* On the other hand, as many as 63% of full-time students provided no answer to these research questions. This data suggests that less-experienced students are often incapable of reflecting on future activities or creating more meaningful projects without previous work with children; that is,

M. Županić Benić: *Art Portfolios in Preschool Teachers' Initial Education as a Means of Acquiring Professional Competences and Reflective Practice*

193

the lack of practical experience limits the possibility of creating new and original pedagogical ideas. This study also shows that the lack of a real context of working with children can inhibit student creativity because these teacher trainees lack sufficient reference points to connect theory and practice. In contrast to full-time students, part-time students provided answers that were more diverse, detailed and mindful. Although 32% of them also failed to answer these questions, the percentage is significantly lower in comparison to full-time students. Based on their responses, students in the sample who have work experience possess a better developed reflective capacity and ability to integrate new skills into their professional roles. This is one of the part-time students' answers: *"Making rag dolls for playing in general. I thought about making another rod puppet, although I would use it only for demonstration with children. However, for now, I would not organise puppet making in the group because of the challenging process. Perhaps once, when I have more experience. I find the children's puppet show using hand puppets very appealing, where two preschool teachers play different characters."* This answer is an example of a more in-depth reflection on the technical and pedagogical challenges as well as an understanding of the puppet making process in various pedagogical contexts, which is a characteristic of professionally experienced individuals. One of the most noticeable differences between full-time and part-time students regards the inclusion of parents and the wider community in pedagogical activities. While none of the full-time students mentioned this facet of cooperation, part-time students pointed out the importance of including parents in creative projects multiple times. This difference points to part-time students' deeper understanding of the importance of cooperation between parents, children and preschool teachers (Visković and Višnjić Jevtić, 2019), which can be correlated to their practical experience and acquired professional competences. The following answers attests to this fact: *"It would be interesting to include parents in the joint work with children, so they also learn something new. I believe that children could develop their skills, enrich their knowledge and experience new emotions throughout the process."* Therefore, student recognition of parental inclusion in preschool activities as important is indispensable for their professional functioning because the primary goal of parent/preschool cooperation is appropriate catering to children's individual and developmental needs and the provision of support for their overall development (NKRPOO, 2015). Besides, part-time students' answers often included concrete and creative suggestions for further projects, which leads to the conclusion that professional experience significantly

contributes to the development of creative pedagogical solutions. For example, one student suggested: *"In my opinion, the complete process of puppet making would probably not be feasible in all preschool groups, but some segments can surely be adjusted to each group, from the youngest to the oldest. For example, papier mâché balloons could be used with children so they paint their faces on them as they wish."* These answers show a higher degree of adjustment and flexibility in pedagogical planning, which is correlated to a deeper understanding of the needs and abilities of children at different ages.

Conclusion

This study confirms the importance of reflection in preschool teachers' professional development, particularly in the context of initial education in the field of visual art. In this study, reflection enabled students to recognise their own creative challenges, analyse technical and aesthetic choices and connect acquired experiences with future pedagogical work. Full-time students achieved higher results in creative tasks – making the rod puppet--while part-time students, who received fewer course lessons, faced greater challenges in the creative process, which points to the need for additional support and resources in initial education. However, with regard to the questions examining the connection between the acquired competences and future pedagogical work and the analysis of students' perceptions of the task's usefulness, it was noted that full-time students gave formal answers, often in the form of simple agreement without further explanation. On the other hand, most part-time students provided more comprehensive and detailed answers, wherefrom it is visible that higher level of practical experience leads to deeper understanding of theoretical concepts and their application in educational work with children. This result is also confirmed by the analysis of implications for future projects, where full-time students' answers were quite simple, without more detailed interpretation, or not provided at all, whereas part-time students provided more diverse, detailed and thought-through answers, with clear ideas and plans for future creative projects. This reflective approach improves creative and professional competences and thus helps future preschool teachers assume a critical stance towards their own work, which is essential for their professional development. The limitations of this research should also be pointed out. Namely, the students in the sample were all attending the same institution, and they had the same professor as their mentor, which can limit the generalisation of results to wider contexts and different pedagogical approaches.

M. Župančić Benić: Art Portfolios in Preschool Teachers' Initial Education as a Means of Acquiring Professional Competences and Reflective Practice

195

References

Barrett, H. C. (2007). Researching electronic portfolios and learner engagement: The reflect initiative. *Journal of Adolescent & Adult Literacy, 50*(6), 436–449.

Bhika, R., Francis, A., and Miller, D. (2013). Faculty professional development: Advancing integrative social pedagogy using eportfolio. *International Journal of ePortfolio, 3*(2), 117–133.

Collins, M. A., and Amabile, T. M. (1999). Motivation and creativity. In R. J. Sternberg (Ed.), *Handbook of Creativity* (pp. 297–312). Cambridge: Cambridge University Press.

Creswell, J. W., and Plano Clark, V. L. (2017). *Designing and Conducting Mixed Methods Research (3rd ed.).* SAGE Publications.

Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience.* New York: Harper & Row.

Day, S. P., Webster, C., and Killen, A. (2022). Exploring initial teacher education student teachers' beliefs about reflective practice using a modified reflective practice questionnaire. *Reflective Practice, 23*(4), 437–451.

Denee, R., Lindsay, G., and Probine, S. (2024). Visual Arts Self-Efficacy: Impacts and Supports for Early Childhood Teachers. *Early Childhood Education Journal, 52*, 1035–1045.

Doren, M., and Millington, A. (2019). A Pedagogy for Reflective Practice: Art and Design Thinking Made Visible Using an Online Learning Portfolio. *International Journal of ePortfolio, 9*(2), 75–86.

Eraut, M. (2003). Transfer of knowledge between education and the workplace. In H. P. A., Boshuizen, W. M. G. Jochems, M. Eraut, and W.H. Gijselaers (Eds.), *Expertise Development: The transition between school and work*, (pp. 52–73). Open Universiteit Nederland.

Feldman, D. H. (2003). A developmental, evolutionary perspective on giftedness. In J. H. Borland (Ed.), *Rethinking Gifted Education,* (pp. 9–33). NY: Teachers College Press.

Garvis, S., and Riek, R. (2010). Improving generalist teacher education in the arts. *The International Journal of the Arts in Society, 5*(3), 159–167.

Gibbons, M., and Borders, L. D. (2010). The Importance of Practical Experience in Teacher Education Programs. *Journal of Education and Practice, 1*(2), 12–23.

Herzog, J., Bačlija Sušić, B., and Župančić Benić, M. (2018). Samoprocjena profesionalnih kompetencija studenata ranoga i predškolskog odgoja i obrazovanja u provođenju likovnih i glazbenih aktivnosti s djecom. *Nova prisutnost: časopis za intelektualna i duhovna pitanja, 16*(3), 579–592.

Iezaki, M. and Novotná, M. (2022). Reconciling the Other: Travelling objects & collaborative teaching. *Journal of Elementary Education.* 15(1), 1–16.

Johnson, R. B., and Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher, 33*(7), 14–26.

Lindsay, G. (2021). Visual arts pedagogy in early childhood contexts: The baggage of self-efficacy beliefs, pedagogical knowledge and limited pre-service training. *Australasian Journal of Early Childhood, 46*(1), 80-92.

Machost, H., and Stains, M. (2023). Reflective practices in education: A primer for practitioners. *CBE—Life Sciences Education, 22*(2), es2.

Marzano, R. J. (2006). *Classroom Assessment and Grading That Work.* Minnesota: Association for Supervision and Curriculum Development.

Mayring, P. (2002). Qualitative content analysis – Research instrument or mode of interpretation? In M. Kiegelmann (Ed.), *The Role of the Researcher in Qualitative Psychology* (pp. 139–148). Tübingen: Verlag Ingeborg Huber.

Mayring, P. (2022). *Qualitative Content Analysis: A step by step guide.* NY: Sage.

Matijević, M., Bilić, V., and Opić, S. (2016). *Pedagogija za učitelje i nastavnike.* Zagreb: Školska knjiga.

McArdle, F. (2012). New maps of learning for quality art education: What pre-service teachers should learn and be able to do. *Australian Educational Researcher, 39*(1), 91-106.

Mejovšek, M. (2008). *Metode znanstvenog istraživanja u društvenim i humanističkim znanostima.* Jastrebarsko: Naklada slap.

Moon, J. A. (2013). *The Handbook of Reflective and Experiential Learning: Theory and Practice.* London: Routledge.

Nacionalni kurikulum za rani i predškolski odgoj i obrazovanje (2015). Ministartvo znanosti i obrazovanja.https://mzom.gov.hr/UserDocsImages/dokumenti/Obrazovanje/Predskolski/Nacionalni%20kurikulum%20za%20rani%20i%20predskolski%20odgoj%20i%20obrazovanje%20NN%2005-2015.pdf

Novotná, M. (2025). Neznámkovat, reflektovat! [Reflect but not assess! Portfolio in Art Education]. Univerzita Karlova, Pedagogická fakulta.

Probine, S. (2016). 'Choosing the good things': Reconceptualising and reopening discourses surrounding visual arts pedagogies in early childhood education. *International Art in Early Childhood Research Journal, 5*(1), 1–11.

Richards, R. D., and Terreni, L. (2022). Intentionally supporting and extending young children's learning about and through the visual arts: Suggestions and strategies for early childhood education teachers. *Curriculum Matters, 18*, 88-106.

Runco, M. A., and Acar, S. (2012). Divergent Thinking as an Indicator of Creative Potential. *Creativity Research Journal, 24*(1), 66–75.

Schön, D. (1987). *Educating the Reflective Practitioner: Toward a new design for teaching and learning in the professions*. San Francisco: Jossey-Bass.

Sternberg, R. J. (1999). *Handbook of Creativity*. Cambridge: Cambridge University Press.

Šagud, M. (2006). *Odgajitelj kao refleksivni praktičar*. Petrinja: Visoka škola u Petrinji.

Visković, A., and Višnjić Jevtić, A. (2019). *Je li važnije putovati ili stići? Prijelazi djece rane i predškolske dobi iz obitelji u odgojno-obrazovne institucije*. Zagreb: Alfa.

Zupančič, T. (2020). The creative artistic portfolio and reporting by art education students on their student teaching. *Journal of Elementary Education*, *13*(1), 19–40.

Županić Benić, M. (2019). The role of previous art experiences in students' self-reflections after conducting visual arts activities in early childhood and preschool education. In M. Županić Benić, O. Holz, and M. Michielsen (Eds.), *Requirements and Approaches for Contemporary Teacher Training* (pp. 251–263).

Author
Marijana Župaić Benić, PhD

Associate Professor, University of Zagreb, Faculty of Teacher Education, Savska 77, 10000 Zagreb, Croatia, e-mail: marijana.z.benic@gmail.com
Izredna profesorica, Univerza v Zagrebu, Pedagoška fakulteta, Savska 77, 10000 Zagreb, Hrvaška, e-pošta: marijana.z.benic@gmail.com

COLLABORATION AS A SOFT SKILL IN SPECIAL EDUCATION TEACHERS: A SYSTEMATIC LITERATURE REVIEW

ASSIMINA TSIBIDAKI & AIKATERINI VRACHNA

Department of Primary Education, University of theAegean, Greece

KORESPONDENČNI AVTOR/CORRESPONDING AUTHOR
tsibidaki@aegean.gr

Abstract/Izvleček
This study explores the role of collaboration as a crucial soft skill for special education teachers (SETs), focusing on its impact on their professional development and teaching practices. Through a qualitative review of 15 studies (2012–2024), findings highlight that, while collaboration enhances inclusive education, challenges persist, including heavy workloads, large class sizes, limited training, and negative attitudes. SETs view collaboration with schools, families, and colleagues as vital to improving both teaching effectiveness and student outcomes. The study underscores the need to integrate collaborative practices into teacher preparation programs to foster professional growth and create more inclusive, supportive learning environments.

Sodelovanje kot mehka veščina pri učiteljih specialne pedagogike: sistematični pregled literature
Študija obravnava sodelovanje kot ključno mehko veščino učiteljev specialne pedagogike in analizira njegov vpliv na strokovni razvoj ter pedagoške prakse. Sistematični pregled 15 študij (2012–2024) razkriva, da sodelovanje pomembno prispeva k inkluzivnemu izobraževanju. Kljub temu ostajajo izzivi, kot so preobremenjenost, veliki oddelki, pomanjkanje usposabljanja in negativne naravnanosti. Učitelji specialne pedagogike poudarjajo pomen sodelovanja s šolami, družinami in kolegi za izboljšanje učinkovitosti poučevanja, učnih dosežkov ter socialne in čustvene podpore učencem s posebnimi potrebami. V študiji izpostavljamo potrebo po vključevanju sodelovalnih praks v izobraževalne programe učiteljev, da bi spodbudili strokovni razvoj in ustvarili bolj vključujoča, prilagodljiva ter uspešna učna okolja.

University of Maribor Press

Introduction

Research on teachers' soft skills is a vital and evolving field that has garnered significant attention from experts in recent years (Vasanthakumari, 2019). A crucial soft skill that teachers should develop is collaboration, which is a key social skill. Collaboration involves activities that are collectively planned (Vangrieken et al., 2015). A more recent definition of collaboration describes it as a process of exchange, where individuals share information, materials, or knowledge (Bush and Grotjohann, 2020). Through collaboration, teachers can reflect on and reassess their practices, modify strategies, and work toward improving themselves, their students, and the overall school environment (Giakoumi and Theofilidis, 2012).

Modern education demands an approach centred on collaboration. Teachers must possess the ability to collaborate effectively to fulfil their educational responsibilities. In today's work environment, teamwork is gaining increasing importance and is rapidly becoming the standard in organizations across various sectors (Edmondson, 2013). The educational context is a crucial setting for collaboration, from the perspective of both teachers and students. Teachers have the potential to shape collaborative learning experiences for students by working as a team, while also modelling collaborative skills through their own attitudes and behaviours (Coke, 2005). Collaboration is the style professionals select to employ based on mutual goals, parity, shared responsibility for key decisions, shared accountability for outcomes, shared resources, and the development of trust, respect, and a sense of community (Friend and Cook, 1990, 2010). Collaboration is increasingly acknowledged as a cornerstone of professional development and inclusive education, creating environments where teachers can learn from one another and adapt to the diverse needs of students (Hargreaves and O'Connor, 2018). Educator collaboration aligns with global priorities, including the United Nations Sustainable Development Goal 4, which advocates for inclusive and equitable quality education (UNESCO, 2017).

Collaboration occurs at different levels: sharing represents the lowest level, followed by job sharing, and at the highest level is co-construction, where individuals work together throughout the completion of a project (Bush and Grotjohann, 2020). Despite ongoing efforts to enhance collaboration among teachers, challenges remain because of the deep-rooted norms of teacher autonomy (Johnston and Tsai, 2018). This indicates that effective collaboration requires not only adjustment to individual practices but also a transformation of the broader educational system(Vangrieken et

al., 2015). The same authors observe that while teaching in the past was marked by an individualistic approach, modern pedagogy now emphasizes the importance of collaborative learning. Co-teaching can be defined as the collaboration between a general education teacher and a special education teacher or other specialist to jointly provide instruction to a diverse group of students, including those with disabilities, in a general education setting and in a way that is flexible and purposeful in meeting their learning needs (Friend, 2008). A school environment with high levels of collaboration benefits all stakeholders, particularly students, teachers, and the institution itself, fostering both professionalism and growth (Ifanti et al., 2017). This practice not only enhances the inclusion of students with disabilities in mainstream schools but also serves as a professional learning framework for teachers themselves, as it cultivates skills of collaboration, communication, emotional intelligence and responsibility sharing (Hargreaves and O'Connor, 2018).

Collaboration among teachers is recognized as a key factor in enhancing teaching quality and promoting inclusive education (Hargreaves and O'Connor, 2018). However, education systems vary in their institutional policies, structures, and practices (Vangrieken et al., 2015). For instance, the institutional framework in the United States supports collaboration through co-teaching, particularly in special education (Friend et al., 2010). In terms of teacher education and training in collaboration, both Australia and the United States integrate it into university teacher education programs, albeit with expected variations (Neal et al., 2013).

At the global level, initiatives such as the Sustainable Development Goals (SDGs), particularly Goal 4, promote "equitable and quality education for all" and recognize collaboration as a key element in implementing inclusion (United Nations, 2015). Erasmus programs also support the exchange of best practices among schools and the professional development of teachers (European Commission, 2021). Digital tools can enhance teacher collaboration (Blikstad-Balas and Klette, 2020), while ongoing training in collaborative strategies is essential for ensuring inclusion (Pugach et al., 2014).

SETs and teacher aides, such as paraprofessionals, frequently collaborate to support students with disabilities in both general and special education settings. The diversity found in mainstream classrooms underscores the critical role of collaboration in developing inclusive teaching practices (Ainscow, 2016). Collaborative teaching methods are essential for integrating students with disabilities, ensuring their acceptance and value within the community (Wilson College, 2024).

This partnership allows educators to adjust their instructional strategies to accommodate diverse student needs, thereby promoting equitable and accessible learning opportunities for all (Ghedin and Aquario, 2020).

The present study

Global research often centres on secondary school teachers and students (Onabamiro, 2014). Existing literature highlights the complexity of collaboration in modern schools, involving general education teachers, special education teachers (SETs), and other staff members (Hansen et al., 2014). Research further underscores that collaboration among teaching staff fosters alignment of attitudes and bridges the gap between general and special education (Lyons et al., 2016).

This study seeks to examine how SETs conceptualize the soft skill of collaboration, the ways in which they cultivate this skill, and its role in the educational process and their professional growth. Specifically, the study addresses the following research questions:

o   *How do SETs conceptualize the soft skill of collaboration?*
o   *How do SETs develop the soft skill of collaboration?*
o   *What is the contribution of the soft skill of collaboration to the educational process?*

Method

Search strategy

This study adopted a systematic literature review methodology following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Page et al., 2021). A thorough search was performed across various databases, including Science Direct, Heal Link, Google Scholar, ResearchGate, PubMed, Wiley Online Library, ERIC, Taylor & Francis, Elsevier, and the National Documentation Centre. The review targeted academic papers published between 2012 and 2024, aiming to identify research that explores factors facilitating the development of the soft skill of collaboration among SETs.

To enhance precision, a comprehensive set of search terms was designed to address the core elements of the research question: the conceptualization, enhancement, and impact of collaboration in SETs. Keywords included "teacher/s," "special education

A. Tsibidaki & A. Vrachna: Collaboration as a Soft Skill in Special Education Teachers: A Systematic Literature Review

201

teacher/s," "soft skill/s," and "collaboration." Boolean operators (AND, OR, NOT) were utilized to refine search results effectively. Articles were selected based on these terms appearing in the title, abstract, or keywords. Only peer-reviewed journal articles written in English or Greek were included. Relevance was determined by screening titles, abstracts, and, when necessary, full texts. Additionally, reference lists and citations of key studies were reviewed to identify further relevant research.

Selection criteria

The studies included in this systematic review were chosen based on specific inclusion and exclusion criteria to maintain relevance, quality, and consistency.

o   Inclusion criteria: Studies were included if they fulfilled predefined requirements such as language, research design, thematic alignment, and pertinence to the research question.

o   Exclusion criteria: Studies were excluded if they failed to meet these requirements, particularly concerning language, methodological approach, or relevance to the research question.

These criteria are detailed in Table 1.

Table 1

Inclusion and exclusion criteria for publications.

Inclusion criteria	Exclusion criteria
Published between 2012 and January 2024	Published before 2012
Published in Science Direct, Heal Link, Google Scholar, Research Gate, PubMed, Wiley Online Library, ERIC, Taylor & Francis, Elsevier, and the National Documentation Centre	Not published in Science Direct, Heal Link, Google Scholar, Research Gate, PubMed, Wiley Online Library, ERIC, Taylor & Francis, Elsevier, and the National Documentation Centre
Written in English or Greek Published in peer-reviewed journals	Not written in English or Greek Not published in peer-reviewed journals
The thematic focus is on the soft skill of collaboration in SETs	The thematic focus is not on the soft skill of collaboration in SETs
Qualitative, quantitative, or mixed methods	Not qualitative, quantitative, or mixed methods

PRISMA Stages

The review process adhered to the PRISMA guidelines, which involved several stages:

1. Identification (n=160): The initial search resulted in a total of 160 records from the selected databases. After removing 30 duplicate articles, 130 unique records remained for screening.

2. Title screening (n=130): The titles of the remaining 130 articles were reviewed for relevance to the research topic. At this stage, 50 articles were excluded for the following reasons:

1. Irrelevance to the research topic: The article did not focus on the soft skill of collaboration in SETs or its development.
2. Failure to address the research questions: The study did not adequately explore the conceptualization, development, or contribution of collaboration among SETs.
3. Lack of methodological rigor: The study used an approach that did not meet the inclusion criteria, such as lacking appropriate data analysis or relying solely on anecdotal evidence.

The remaining 80 records proceeded to abstract screening.

3, Abstract screening (n=80): The 80 remaining articles were evaluated based on their abstracts. At this stage, 65 articles were excluded for the following reasons:

1. Being off-topic: The study did not focus on collaboration as a soft skill.
2. Lack of focus on collaboration in SETs: The article addressed collaboration in other educational contexts or in general, not specifically in relation to SETs.
3. Language: The article was not published in English or Greek.

The remaining 15 articles proceeded to full-text review.

1. Full-text review (n=15): The full texts of the remaining 15 articles were retrieved and reviewed in detail. These articles were assessed according to the inclusion and exclusion criteria, and no further articles were excluded at this stage.
2. Inclusion (n=15): All 15 studies that met the eligibility criteria were included in the final review. These studies provided valuable insights into the conceptualization, development, and contribution of the soft skill of collaboration among SETs.

A. Tsibidaki & A. Vrachna: *Collaboration as a Soft Skill in Special Education Teachers: A Systematic Literature Review*

203

The PRISMA flowchart illustrating the full review process is presented in Figure 1:
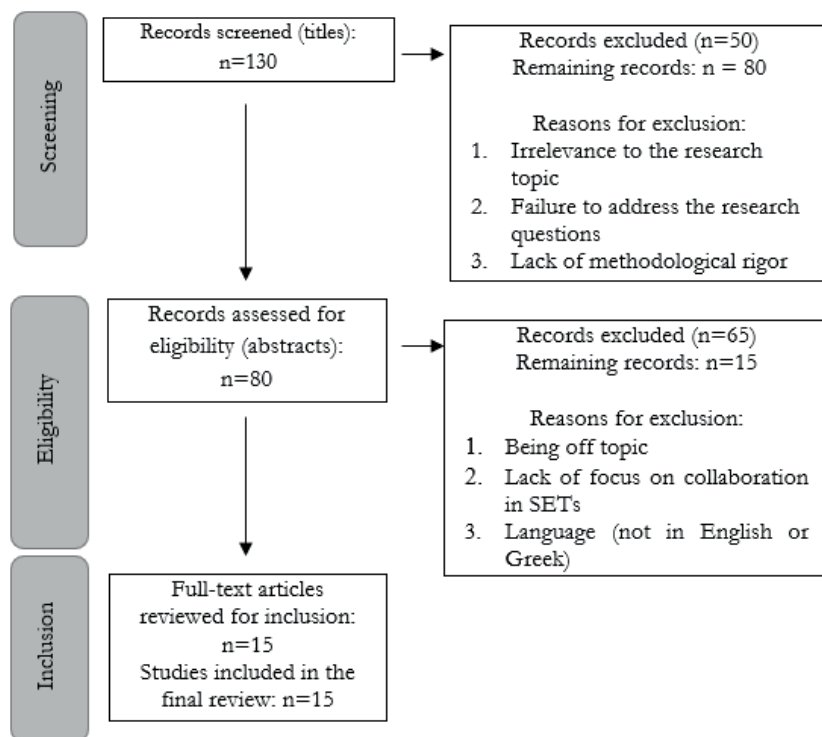
Figure 1
Review process of articles for inclusion in systematic review (PRISMA flowchart)

Data coding

The articles were carefully analysed for content related to the soft skill of collaboration among SETs. Thematic analysis was used to identify key themes from the studies' findings (Saunders et al., 2023).

In the first stage, each article was coded line-by-line. In the second stage, descriptive themes were generated to accurately reflect the content of the included studies. The third stage involved developing final analytical themes, which required interpreting the results to uncover deeper insights.

The authors independently analysed the data, extracting relevant information, organizing the codes, and identifying potential themes, achieving a 95% agreement

rate. The identified themes included the conceptualization of collaboration, methods for developing collaboration, its contribution to the educational process, and its role in the professional development of SETs.

Subsequently, the authors reviewed the themes, codes, and key narratives to reach a consensus. The main themes were then organized into tables, which clearly presented the findings along with the relevant percentages. Cohen's kappa was used to measure the agreement and found that the agreement between the raters was 0.70 substantial agreement.

Results

Characteristics of these studies

A total of 160 articles were initially identified, with 130 remaining after duplicates were removed. Following the review of titles and abstracts, 50 articles were excluded, leaving 80 for further evaluation. After assessing relevance, 65 articles were excluded, resulting in 15 studies being included in the final review. These studies were published in various international journals. The results of the research contain data on the number of studies researched per year (Figure 1), their country of origin (Figure 2), the type (Figure 3), the number of study participants (Figure 4), and the percentage of SET participants in each research sample (Figure 5).
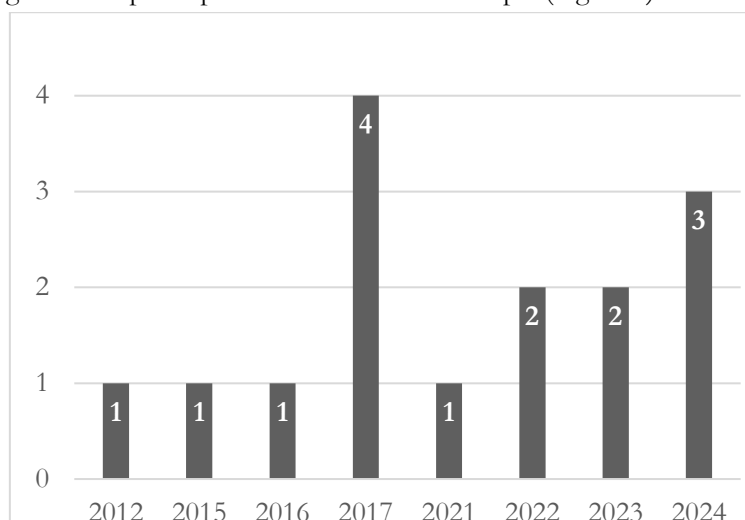
Figure 1
Number of studies per year
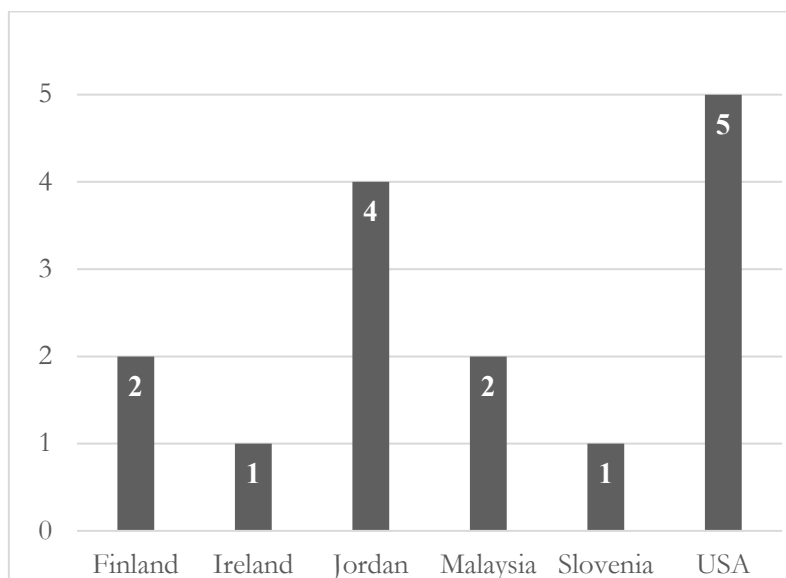
Figure 2
Number of studies by country

Figure 3
Number of studies by type

Figure 4. Distribution based on the number of study participants

Figure 5

Distribution based on the percentage of SET participants in each research sample

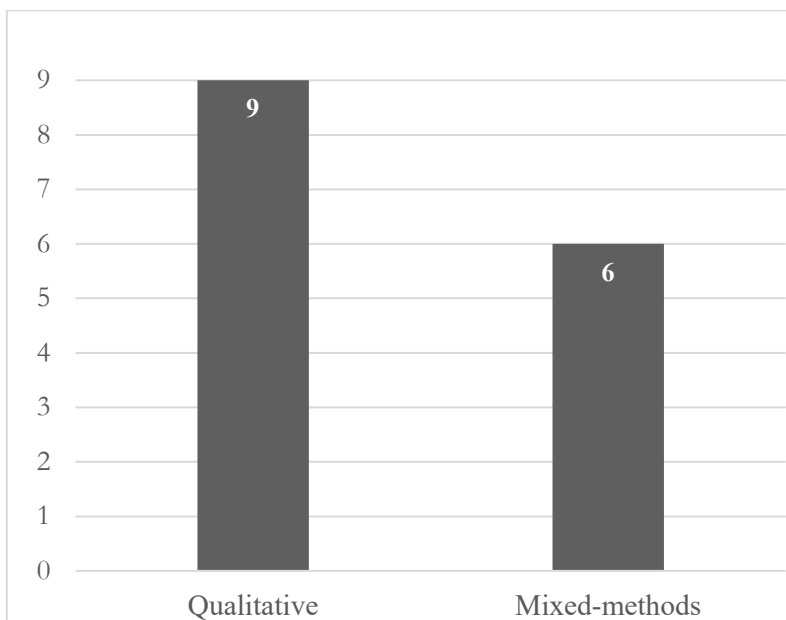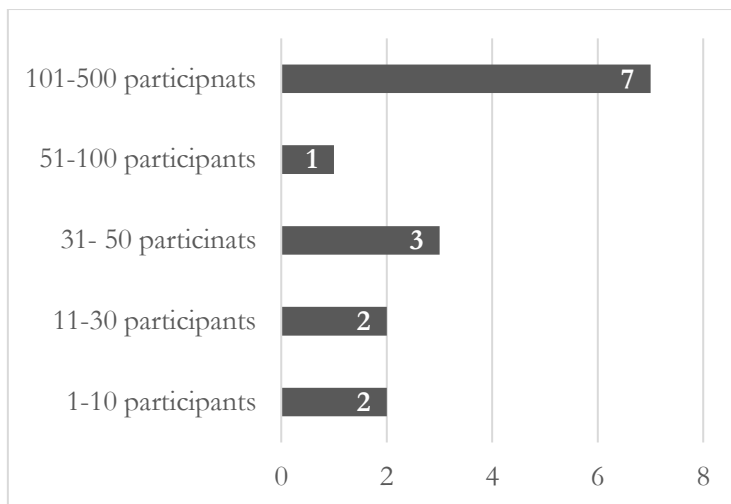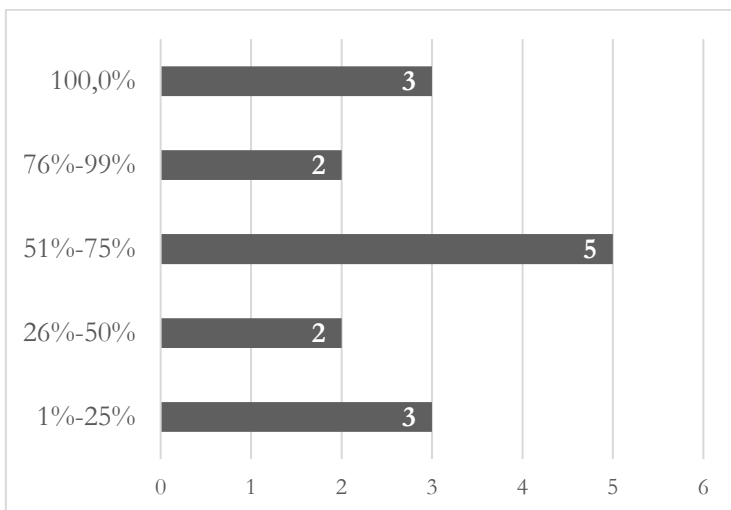A summary of their characteristics, including authors, publication year, country of origin, objectives, research methods, participants, findings, and implications for the educational process, is provided in Table 2.

Table 2

An overview of the studies and findings of research included in the analysis.

Study and country of origin	Objective of the study	Research methods, Participants	Findings	Implications for educational process
Abu-Alghayth (2024) Jordan	To investigate teachers' lived experiences of instructional collaboration in mainstream and inclusive education settings.	Qualitative, 6 SETs and 3 general education teachers (GETs).	Revealed various factors that influence the successful implementation of this practice.	Strengthening teacher collaboration enhances the educational process by fostering inclusive classrooms that address the diverse needs of all students.
Alghazo and Alkhazaleh (2021) Jordan	To identify the level of practicing collaboration between regular and SETs.	Mixed methods, 75 GETs and 60 SETs.	Collaboration between regular teachers and SETs was moderate, with differences based on education level but no gender differences.	Enhancing professional development programs, promoting inclusive practices, curriculum, and teaching strategies to improve teaching effectiveness and student outcomes.
Alhossyan (2023) Jordan	To identify the level of practicing collaboration between regular and SETs. To understand how collaboration between SETs and GETs functions and provide recommendation.	Qualitative/ Systematic review, 17 articles	Implications for practice and recommendations for future research are presented in addition to the data obtained.	Strengthening collaboration between special and general education teachers to enhance professional development, promote inclusive practices, and ensure that educational policies and resources support effective teamwork in the classroom.
Al-Natour et al. (2015) Jordan	To explore the extent of collaboration between GETs and SETs in Jordan.	Mixed method, 250 SETs and 250 GETs.	Collaboration is constrained by various factors.	Fostering a more collaborative and inclusive educational environment in Jordan, improving teacher practices and enhancing student experience in mainstream schools.

Azmah et al. (2017) Malaysia	To explore how collaboration is conducted and implemented in the Inclusive Special Education Program classrooms.	Qualitative, 441 GETs and SETs.	The type of collaboration approach that are usually being used is the "collaboration-consultation" approach.	Improving the implementation of inclusive education by ensuring that both general and special education teachers are equipped to work together to meet the needs of all students.
Da Fonte and& Barton-Arwood (2017) USA	The perspectives of GETs and preservice SETs candidates.	Qualitative, 6 future GETs and 20 SETs.	The themes of time, content knowledge, and communication emerged as important to this group of future teachers.	Highlighting the importance of fostering collaboration between general and special education teachers to enhance inclusive practices, improve student outcomes, and promote professional development focused on teamwork and co-teaching strategies.
Khairuddin et al. (2016) Malaysia	The perceptions of SETs in Malaysia regarding their interactions with general education teachers.	Quantitative, 48 SETs and GETs.	There appeared to be good relations between SETs, but limited collaboration.	Strengthening inclusive education in Malaysia by enhancing collaboration between general and special education teachers to improve teaching practices and student support.
Paju et al. (2022) Finland	To extend the current understanding of collaboration between teaching staff.	Qualitative, 138 GETs and 29 SETs.	Indicate coordination, cooperation, and reflective communication as modes of collaborative action in the participants' teaching.	Improving the overall effectiveness of inclusive education by fostering stronger collaborative efforts among teaching staff, ensuring that all students receive the support they need to succeed.

A. Tsibidaki & A. Vrachna: Collaboration as a Soft Skill in Special Education Teachers: A Systematic Literature Review

209

Paloniemi et al. (2023) Finland	To examine successful and unsuccessful collaboration with the classroom teachers in a tiered support framework.	Qualitative, 238 SETs.	The perceived agency of SETs is shaped by classroom teachers' understanding of their shared responsibility for supporting students.	Enhancing the role of special education teachers in collaborative settings to improve professional development and lead to better educational outcomes for students with diverse learning needs.
Parker et al. (2012) USA	To address calls for improving collaborative teacher preparation for students with disabilities.	Qualitative, 21 elementary and 25 pre-service SETs.	Developing an understanding of co-teaching as a complex construct and the role of field experience in shaping perceptions of co-teaching.	Improving the preparation of future educators to ensure they are equipped to collaborate effectively in inclusive educational settings, ultimately benefiting all students.
Ramirez and Lynch (2024) Ireland	To explore teachers' perceptions of teamwork and collaboration in AAC (Augmentative and Alternative Communication) service delivery in Ireland.	Qualitative, 5 SETs.	The impact of recent service changes on collaboration was emphasized, with all participants acknowledging the need for improved collaboration.	Enhancing collaboration within AAC teams to ensure special education teachers are well-prepared to support students through service changes, improving educational experiences for students with communication needs.

Ricci et al. (2017) USA	To describe a university-based early fieldwork program where special education licensure candidates taught local urban children, developing their collaboration and co-teaching skills	Mixed method, 57 preservice SETs.	Highlight the importance of special education teacher preparation programs that explicitly train students in collaboration and co-teaching skills	Enhancing the preparation of special educators to ensure they are better prepared to work in inclusive classrooms and provide effective support for all students.
Rihter et al. (2024) Slovenia	To investigate how they collaborate with pupils with severe specific learning difficulties and how this collaboration influences their professional development.	Qualitative, 83 SETs and 55 GETs.	Most participating professionals felt that collaboration was necessary.	Fostering a collaborative and inclusive educational environment that benefits both teachers and students, particularly those with severe specific learning difficulties.
Vostal et al. (2022) USA	To investigate how general and SETs perceive trust in their collaborative relationships.	Qualitative, 112 GETs and 24 SETs.	Teachers who experienced trusting relationships promoted equity between roles and developed norms to support collaboration.	Strengthening collaborative practices between general and special educators to improve the quality of education for students with diverse needs.
Zagona et al. (2017) USA	To investigate educators' preparedness for inclusive education.	Mixed methods, 10 GETs and 33 SETs.	There was a relationship between educators' preparedness for inclusive education. Provided a deeper understanding of the educators' preparation and experiences.	Contributing to the improvement of inclusive education practices and collaboration between teachers to achieve better educational outcomes for students with diverse learning needs.

A. Tsibidaki & A. Vrachna: *Collaboration as a Soft Skill in Special Education Teachers: A Systematic Literature Review*

211

The articles examined highlight the limited nature of collaboration between SETs and GETs (Al-Natour et al., 2015; Khairuddin et al., 2016; Alghazo and Alkhazaleh, 2021; Alhossyan, 2023). The analysis revealed that SETs primarily associate collaboration with the development of mutual understanding (Parker et al., 2012; Zagona et al., 2017; Paliomeni et al., 2022). SETs also view collaboration as integral to effective teaching and learning (Azmah et al., 2017; Pazu et al., 2022; Rihter et al., 2024). Furthermore, collaboration is seen as encompassing personal relationships and trust (Vostal et al., 2022), as well as key skills such as time management, content knowledge, communication, and conflict resolution (Da Fonte and Barton-Arwood, 2017). Additionally, collaboration is influenced by university programs (Ricci et al., 2017), shaped by various contextual factors (Abu-Alghayth, 2024), and characterized by a multidisciplinary structure and approach (Ramirez and Lynch, 2024).

Ways of developing the soft skill of collaboration
Our analysis of the articles identified several effective methods for developing collaboration among SETs. Education and professional development programs emerged as the most frequently cited strategies for fostering collaboration (Al-Natour et al., 2015; Khairuddin et al., 2016; Da Fonte and Barton-Arwood, 2017; Ricci et al., 2017; Azmah et al., 2017; Zagona et al., 2017; Alghazo and Alkhazaleh, 2021; Rihter et al., 2024). Additionally, shared daily tasks were highlighted as valuable opportunities for collaboration (Paliomeni et al., 2023; Abu-Alghayth, 2024; Ramirez and Lynch, 2024). Collaborative practices across various educational settings (Pazu et al., 2021) also played a significant role in enhancing collaboration. Furthermore, co-teaching approaches (Parker et al., 2012), trust-building activities (Vostal et al., 2022), and support from school leaders and decision-makers (Alhossyan, 2023) were recognized as key factors in developing collaboration.

Evaluation of the contribution of collaboration to the educational process
Evaluation of collaboration's contribution to the educational process revealed a variety of perspectives from SETs. Several studies highlighted the crucial role of collaboration in addressing educational challenges (Al-Natour et al., 2015; Da Fonte and Barton-Arwood, 2017; Azmah et al., 2017; Paju et al., 2022; Abu-Alghayth, 2024). Co-teaching emerged as another significant benefit associated with collaboration (Parker et al., 2012; Ricci et al., 2017; Zagona et al., 2017). The positive impact of collaboration was also observed in students' academic performance

(Alhossyan, 2023; Rihter et al., 2024) and in the development of a collaborative school culture (Alghazo and Alkhazaleh, 2021; Ramirez and Lynch, 2024). Furthermore, teacher collaboration was identified as a key driver of educational progress (Khairuddin et al., 2016), fostering trust among educators (Vostal et al., 2022) and promoting the division of labour (Paliomeni et al., 2023).

Evaluation of collaboration's contribution to the development and progression of special education teachers

The review of articles on the role of collaboration in the development and progression of SETs revealed a high degree of consistency in the findings. The most frequently cited benefit of collaboration was its positive impact on effective teaching practices (Khairuddin et al., 2016; Da Fonte and Barton-Arwood, 2017; Ricci et al., 2017; Azmah et al., 2017; Alghazo and Alkhazaleh, 2021; Paliomeni et al., 2023). Additional findings highlighted that collaboration also supports teacher preparation (Parker et al., 2012; Al-Natour et al., 2015; Zagona et al., 2017; Paju et al., 2022; Vostal et al., 2022) and fosters the learning of collaborative practices (Alhossyan, 2023; Abu-Alghayth, 2024; Ramirez and Lynch, 2024). Furthermore, collaboration was found to significantly enhance teachers' professional development (Rihter et al., 2024).

Discussion

This study aimed to examine the soft skill of collaboration among SETs. Specifically, it investigated how SETs conceptualize collaboration, the strategies they employ to develop this skill, and its contributions to both the educational process and their professional growth and career progression.

In terms of how SETs conceptualize collaboration, findings indicate that they perceive it as occurring at a limited level. This result aligns with findings from other studies (Boehme, 2020). Additionally, SETs associated collaboration with effective teaching and learning, a perspective consistent with existing literature (Solis et al., 2012; Simon, 2017). Moreover, teachers identified collaboration as being rooted in mutual understanding, a view supported by previous research (Robinson, 2017). Another prevalent perception was the close connection between collaboration, personal relationships, and trust. Indeed, prior studies have demonstrated that trust

A. Tsibidaki & A. Vrachna: *Collaboration as a Soft Skill in Special Education Teachers: A Systematic Literature Review*

213

is a critical factor in fostering collaboration among teachers (Hallam et al., 2014; Scruggs and Mastropieri, 2017).

Regarding the development of collaboration, most teacher responses emphasized the pivotal role of education and professional development programs in fostering this skill. The significance of enhancing collaboration through such programs has been similarly highlighted in previous research (Pellegrino et al., 2017). Another recurring theme in this study was the value of sharing day-to-day work responsibilities, a finding consistent with earlier studies (Molina and Lopez, 2019). Additionally, teachers who implemented diverse practices and strategies in their educational activities tended to achieve more effective collaboration outcomes. This evidence suggests that programs across varied contexts play a crucial role in cultivating qualified teachers and promoting collaboration (Le et al., 2018).

An important factor identified in the studies reviewed is that collaboration among SETs is often driven by the need to address challenges in the educational process. These findings are consistent with prior research (Nguyen et al., 2022). Moreover, collaboration was recognized as critical to the educational process, particularly within the context of co-teaching. Effective implementation of co-teaching is frequently attributed to the combined impact of school-based and professional development initiatives, supported by organizational structures and resources that facilitate collaboration (Jurkowski et al., 2023). Other recurring themes included progress, and the positive outcomes experienced by students. These findings align with existing literature, which emphasizes that fostering teacher collaboration significantly enhances student outcomes (Ronfeldt et al., 2017). Consistent with other studies, strengthening collaboration within schools is viewed as a key strategy for advancing and evolving the educational process (Ainscow, 2016). A particularly notable finding, especially among SETs, is the connection between collaboration and the development of a supportive school culture. Collaborative cultures are shown to arise from positive working environments and strong relationships among colleagues (Sutton and Shouse, 2016).

The literature review revealed that effective preparation and teaching were outcomes of teachers' collaboration skills. These results align with previous research (DeMonte and Coggshall, 2018; Brown and Poortman, 2018). Additionally, a key element identified by SETs regarding the impact of collaboration on their work was the acquisition of new practices. This finding is consistent with other studies (Hargreaves, 2021).

The literature review revealed that effective teacher preparation and instructional practices are key outcomes of collaboration skills among educators. These findings are consistent with prior research (Brown and Poortman, 2018; DeMonte and Coggshall, 2018). Additionally, a significant aspect identified by SETs regarding the impact of collaboration on their work was the acquisition of new teaching practices. This result aligns with findings from other studies (Hargreaves, 2021).

To overcome the barriers to collaboration, team-based instructional planning is proving effective in reducing working time and improving the quality of teaching (Strogilos et al., 2016). Furthermore, administrative support helps collaboration between teachers and consequently their effectiveness (Shogbesan et al., 2024). An important suggestion for overcoming visual barriers would be to promote collaboration through educational networks and learning communities, which create for teachers to exchange ideas and good practice (Brown and Poortman, 2018).

Contribution to practice

The growing body of research on teacher collaboration (2012–2024) underscores its critical role in special education. This study highlights the necessity of effective teacher training in collaborative practices and their integration into both instructional methods and the broader school environment. It further emphasizes the importance of considering the diverse contexts that influence collaboration, presenting both challenges and opportunities for future investigation. By fostering teamwork among educators, incorporating collaborative technologies, and establishing professional learning communities, schools can enhance teacher efficacy, improve student outcomes, and cultivate a more inclusive educational landscape. There are still significant gaps in understanding how collaboration can be improved through different structures, policies and technological tools (Vangrieken et al., 2015). Future research could examine the long-term effects of collaborative practices on teacher retention, student engagement, and school-wide improvement. Additionally, studies should investigate the role of emerging technologies in facilitating collaboration. Expanding the range of sources and methodologies in future research will also provide a more comprehensive understanding of teacher collaboration. Long-term studies on the impact of collaboration, policy implementation, technological integration, and cross-cultural comparisons--as well as their role in fostering inclusive education--will provide educators, policymakers,

A. Tsibidaki & A. Vrachna: *Collaboration as a Soft Skill in Special Education Teachers: A Systematic Literature Review*

215

and researchers with deeper insights into optimizing collaboration for improved teaching and learning outcomes.

The policy implications of cooperation in education include reforming the institutional framework for collaboration between general and special education teachers, reviewing teacher training systems, strengthening resources and funding for collaborative teaching models, and enhancing policies on inclusive education through collaboration.

Limitations of the study

The study acknowledges several limitations, including the small number of articles reviewed and the focus on specific databases. Therefore, further research is needed to evaluate the effectiveness of this intervention.

Conclusions

This literature review concludes that SETs hold diverse perceptions of collaboration. Although often perceived as peripheral, collaboration is widely recognized as vital for effective teaching. The reviewed studies underscore the role of teacher education programs in developing collaborative skills, with educators acknowledging that collaboration is instrumental in addressing challenges. Furthermore, collaboration enhances teacher preparation, strengthens instructional practices, and increases overall teaching effectiveness.

References

Abu-Alghayth, K. M. (2024). Understanding teachers' lived experiences of instructional collaboration in inclusive and mainstream settings: A transcendental phenomenological approach. *International Journal of Disability, Development and Education, 72* (2), 1–18. https://doi.org/1–0.1080/1034912X.2024.2317484

Ainscow, M. (2016). Collaboration as a strategy for promoting equity in education: possibilities and barriers. *Journal of Professional Capital and Community*, *1*(2), 159–172 https://doi.org/10.110–8/JPCC-12-2015-0013

Alghazo, E. M., and Alkhazaleh, M. S. (2021). Collaboration between special education teachers and regular education teachers: Implications for professional development. *International Journal of Early Childhood Special Education*, *13*(1), 35–41. https://doi.org/10.9756/int-jecse/v13–i1.211005

Alhossyan, F. (2023). Collaboration between special and general education teachers: A systematic review. *Information Sciences Letters*, *12*(4), 1021–1029. https://dx.doi.org/10.1857–6/isl–/120424

Al-Natour, M., Amr, M., Al-Zboon, E., and Alkhamra, H. (2015). Examining collaboration and constrains [sic] on collaboration between special and general education teachers in mainstream schools in Jordan. *International Journal of Special Education*, *30*(1), 64–77.

Azmah, A. L., Azlinda, W. M., and Azrani, A. M. (2017). Collaboration among teachers in inclusive special education program classrooms. *Advanced Science Letters*, *23*(9), 8316–8321. https://doi.org/10.1166/asl.2017.9884

Blikstad-Balas, M., and Klette, K. (2020). Still a long way to go: Narrow and transmissive use of technology in the classroom. *Nordic Journal of Digital Literacy, 15*(1), 55–68. https://doi.org/10.18261/issn.1891-943x-2020-01-05

Brown, C., and Poortman, C. (Eds.). (2018). *Networks for Learning: Effective collaboration for teacher, school and system improvement*. Routledge. https://doi.org/10.4324/9781315276649

Bush, A., and Grotjohann, N. (2020). Collaboration in teacher education: A cross-sectional study on future teachers' attitudes towards collaboration, their intentions to collaborate and their performance of collaboration. *Teaching and Teacher Education*, *88*, 102968. https://doi.org/10–.1016/j.tate.2019.102968

Coke, P. K. (2005). Practicing what we preach: An argument for cooperative learning opportunities for elementary and secondary educators. *Education, 126*(2), 392–398.

Cook, L., and Friend, M. (2010). The state of the art of collaboration on behalf of students with disabilities. *Journal of Educational and Psychological Consultation, 20*(1), 1–8. https://doi.org/1–0.1080/10474410903535398

Da Fonte, M. A., and Barton-Arwood, S. M. (2017). Collaboration of general and special education teachers: Perspectives and strategies. *Intervention in School and Clinic*, *53*(2), 99–106. https://doi.org/10.1177/1053451217693370

DeMonte, J., and Coggshall, J. (2018). *New Collaborations, New Approaches: Research for improvement in teacher preparation*. American Institutes for Research.

Edmondson, A. C. (2013). *Teaming to Innovate*. John Wiley & Sons.

Friend, M. (2008). Co-teaching: A simple solution that isn't simple after all. *Journal of Curriculum and Instruction*, *2*(2), 9–19. https://doi.org/10.3776/joci.2008.v2n2p9-19

Friend, M., and Cook, L. (1990). Collaboration as a predictor for success in school reform. *Journal of Educational and Psychological Consultation*, *1*, 69–86. https://doi.org/10.1207/s1–532768xjepc0101_4

Friend, M., Cook, L., Hurley-Chamberlain, D., and Shamberger, C. (2010). Co-teaching: An illustration of the complexity of collaboration in special education. *Journal of Educational and Psychological Consultation, 20*(1), 9–27. https://doi.org/10.1080/10474410903535380

Giakoumi, S., and Theofilidis, C. (2012). Collaborative culture as a supportive tool in teachers' work. *Proceedings of the 12th Conference of the Cyprus Pedagogical Society* (pp. 474–483). Cyprus Pedagogical Society.

Hallam, P. R., Dulaney, S. K., Hite, J. M., and Smith, H. R. (2014). Trust at ground zero: Trust and collaboration within the professional learning community. *Trust and School Life: The role of trust for learning, teaching, leading, and bridging* (pp. 145–170). Springer Science + Business Media. https://doi.org/10.1007/978-94-017-8014-8_7

Hargreaves, A. (2019). Teacher collaboration: 30 years of research on its nature, forms, limitations and effects. *Teachers and Teaching*, *25*(5), 603–621. https://doi.org/10.1080/ 13540602.2019.1–639499

Hargreaves, A., and O'Connor, M. T. (2018). Solidarity with solidity: The case for collaborative professionalism. *Phi Delta Kappan*, *100*(1), 20–24. https://doi.org/10.1177/ 00317–21718797116

Ifanti, A. A., Fotopoulou, V. S., and Gaziel, H. H. (2017). Comparative perspectives on professionalism and professional development: An exploratory case study of Greek primary school teachers'

perceptions. *Research in Comparative and International Education*, *12*(4), 486–496. http://dx.doi.or–g/10.1177/1745499917740653

Johnston, W. R., and Tsai, T. (2018). *The prevalence of collaboration among American teachers. National findings from the American Teacher Panel*. Semantic Scholar; RAND Corporation. http–s://doi.org/*10*.10.7249/rr2217

Khairuddin, K. F., Dally, K., and Foggett, J. (2016). Collaboration between general and special education teachers in Malaysia. *Journal of Research in Special Educational Needs*, *16*, 909–913- https://doi.org/10.1111/1471-3802.12230

Le, H., Janssen, J., and Wubbels, T. (2018). Collaborative learning practices: teacher and student perceived obstacles to effective student collaboration. *Cambridge Journal of Education*, *48*(1), 103–122. https://doi.org/10.1080/0305764X.2016.1259389

Molina, C. A., and López, F. S. (2019). Teachers' collaborative work: new toward [sic] for teacher' s development. *Revista Internacional de Investigación En Ciencias Sociales*, *15*(1), 119–133. https://doi.org/10.18004/riics.2019.junio.119-133

Neal, G., Mullins, T., Reynolds, A., and Angle, M. (2013). Global collaboration in teacher education: A case study. *Creative Education, 4*(9), 533–539. https://doi.org/10.4236/ce.2013.49078

Nguyen, C. D., Huynh, T. N., and Tran, N. H. (2022). Overcoming contextual constraints: Implementing classroom pedagogical innovation through teacher leadership. *International Journal of Leadership in Education, 28*(1), 1–19. https://doi.org/10.1080/ 13603124.2021–.2013543

Onabamiro, A. T. (2014). *Determinants of students' achievement in senior secondary school mathematics in south-western Nigeria* (Doctoral dissertation), University of Ibadan, Nigeria.

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., and Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, *372*, 71. https://doi.org/10.1136/bmj.n71

Paju, B., Kajamaa, A., Pirttimaa, R., and Kontu, E. (2022). Collaboration for inclusive practices: Teaching staff perspectives from Finland. *Scandinavian Journal of Educational Research*, *66*(3), 427–440. https://doi.org/10.1080/00313831.2020.1869087

Paloniemi, A., Björn, P. M., and Kärnä, E. (2023). Special education teachers' views on their agency in teacher collaboration. *European Journal of Special Needs Education*, *38*(3), 349–362. https://doi.org/10.1080/08856257.2022.2089509

Parker, A., Alvarez McHatton, P., and Allen, D. D. (2012). Elementary and special education pre-service teachers' understandings of collaboration and co-teaching. *Journal of Research in Education*, *22*(1), 164–195.

Pellegrino, A., Weiss, M., and Regan, K. (2015). Learning to collaborate: General and special educators in teacher education. *The Teacher Educator*, *50*(3), 187–202. https://doi.org/10.1080/ 08878730.2015.1038494

Pugach, M. C., Blanton, L. P., and Boveda, M. (2014). Working together: Research on the preparation of general education and special education teachers for inclusion and collaboration. In E. D. McCray, P. T. Sindelar, M. T. Brownell, and B. Lignugaris/Kraft (Eds.), *Handbook of Research on Special Education Teacher Preparation* (pp. 143–160). Routledge.

Ramirez, S. M., and Lynch, Y. (2024). "Feeling our way around in the dark" AAC team collaboration in the context of service change: Special education teachers' perceptions. *Child Language Teaching and Therapy*, *40*(1), 39–55. http://dx.doi.org/10.1177/02656590241228422

Ricci, L. A., Zetlin, A., and Osipova, A. V. (2017). Preservice special educators' perceptions of collaboration and co-teaching during university fieldwork: Implications for personnel preparation. *Teacher Development*, *21*(5), 687-703. https://doi.org/10.1080/ 13664530.2017–.1293561

Rieckmann, M. (2017). *Education for Sustainable Development Goals: Learning objectives*. UNESCO publishing.

Rihter, J., Babuder, M. K., and Zuljan, M. V. (2023). Collaboration between special education teachers and visual arts education teachers in working with pupils with severe specific learning

difficulties and its relationship to professional development. *European Journal of Special Needs Education*, 39 (1), 19-32. https://doi.org/10.1080/08856257.2023.2185859

Robinson, G. (2017). *Perceptions and attitudes of general and special education teachers toward collaborative teaching* (Unpublished doctoral dissertation, Walden University). https://doi.org/10622862

Saunders, C. H., Sierpe, A., Von Plessen, C., Kennedy, A. M., Leviton, L. C., Bernstein, S. L., Goldwag, J., King, J. R., Marx, C. M., Pogue, J. A., Saunders, R. K., Van Citters, A., Yen, R. W., Elwyn, G., and Leyenaar, J. K. (2023). Practical thematic analysis: A guide for multidisciplinary health services research teams engaging in qualitative analysis. *British Medical Journal*, e074256. https://doi.org/10.1136/bmj-2022-074256

Scruggs, T. E., and Mastropieri, M. A. (2017). Making inclusion work with co-teaching. *Teaching Exceptional Children*, *49*(4), 284–293. https://doi.org/10.1177/0040059916685065

Shogbesan, Y. O., Adeoye, M. A., Osaro-Martins, B. E., & Shabi, Z. (2024). Perceived influence of administrative support on secondary school teachers' effectiveness. *Evaluation Studies in Social Sciences, 5*(2), 102–123. https://doi.org/10.37134/esss.vol5.2.7.2024

Simon, B. D. (2017). *Successful collaboration between general education and special education teachers: A case study* (Unpublished doctoral dissertation, Northcentral University). https://doi.org/1–0633779

Solis, M., Vaughn, S., Swanson, E., and Mcculley, L. (2012). Collaborative models of instruction: The empirical foundations of inclusion and co-teaching. *Psychology in the Schools*, *49*(5), 498–510. https://doi.org/10.1002/pits.21606

Strogilos, V., Stefanidis, A., & Tragoulia, E. (2016). Co-teachers' attitudes towards planning and instructional activities for students with disabilities. *European Journal of Special Needs Education, 31*(3), 344–359. https://doi.org/10.1080/08856257.2016.1141512

Sutton, P. S., and Shouse, A. W. (2016). Building a culture of collaboration in schools. *Phi Delta Kappan*, *97*(7), 69–73. https://doi.org/10.1177/0031721716641653

Vangrieken, K., Dochy, F., Raes, E., and Kyndt, E. (2015). Teacher collaboration: A systematic review. *Educational Research Review*, *15*, 17–40. https://doi.org/10.1016/j.edurev.2015.04.002

Vasanthakumari, S. (2019). Soft skills and its application in work place. *World Journal of Advanced Research and Reviews, 3*(2), 66-72. https://doi.org/10.30574/wjarr.2019.3.2.0057

Vostal, M., Vostal, B. R., Horner, C. G., and LaVenia, K. N. (2022). A qualitative exploration of trust between general and special educators: Implications for collaboration in the preparation of teacher candidates. *Social Sciences & Humanities Open*, *6*(1), 100359. https://doi.org/10.1–016/j.ssaho.2022.100359

Wilson College. (2024). *Benefits of Collaboration in special education*. https://online.wilson.edu

Zagona, A. L., Kurth, J. A., and MacFarland, S. Z. (2017). Teachers' views of their preparation for inclusive education and collaboration. *Teacher Education and Special Education*, *40*(3), 163-178. https://doi.org/10.1177/0888406417692969

Author:

Assimina Tsibidaki, PhD
Full Associate Professor, Department of Primary Education, University of the Aegean, 1 Dimokratias str., 85132 Rhodes, Greece, e-mail: tsibidaki@aegean.gr
Izredna profesorica, Oddelek za osnovno šolstvo, Univer za na Egejskem morju, 1 Dimokratias str., 85132 Rodos, Grčija, e-pošta: tsibidaki@aegean.gr

Aikaterini Vrachna
PhD Candidate, Department of Primary Education, University of the Aegean, 1 Dimokratias str., 85132 Rhodes, Greece, e-mail: pred21003@rhodes.aegean.gr
Doktorska kandidatka, Department of Primary Education, University of the Aegean, 1 Dimokratias str., 85132 Rhodes, Greece, e-mail: pred21003@rhodes.aegean.gr

Interdisciplinary Approach in Primary Education: Animated Films as a Tool For Cross-Cultural Awareness

Loreta Huber

Vilnius University Kaunas Faculty, Institute of Languages, Literature and Translation Studies, Kaunas, Lithuania

Korespondenčni avtor/Corresponding author
loreta.huber@knf.vu.lt

Abstract/Izvleček
This study explores the role of collaboration as a crucial soft skill for special education teachers (SETs), focusing on its impact on their professional development and teaching practices. Through a qualitative review of 15 studies (2012–2024), findings highlight that, while collaboration enhances inclusive education, challenges persist, including heavy workloads, large class sizes, limited training, and negative attitudes. SETs view collaboration with schools, families, and colleagues as vital to improving both teaching effectiveness and student outcomes. The study underscores the need to integrate collaborative practices into teacher preparation programs to foster professional growth and create more inclusive, supportive learning environments.

Interdisciplinarni pristop v osnovnem izobraževanju: animirano Filmi kot orodje za medkulturno ozaveščanje
Študija obravnava sodelovanje kot ključno mehko veščino učiteljev specialne pedagogike in analizira njegov vpliv na strokovni razvoj ter pedagoške prakse. Sistematični pregled 15 študij (2012–2024) razkriva, da sodelovanje pomembno prispeva k inkluzivnemu izobraževanju. Kljub temu ostajajo izzivi, kot so preobremenjenost, veliki oddelki, pomanjkanje usposabljanja in negativne naravnanosti. Učitelji specialne pedagogike poudarjajo pomen sodelovanja s šolami, družinami in kolegi za izboljšanje učinkovitosti poučevanja, učnih dosežkov ter socialne in čustvene podpore učencem s posebnimi potrebami. V študiji izpostavljamo potrebo po vključevanju sodelovalnih praks v izobraževalne programe učiteljev, da bi spodbudili strokovni razvoj in ustvarili bolj vključujoča, prilagodljiva ter uspešna učna okolja.

University of Maribor Press

Introduction

The interdisciplinary approach in education aligns closely with the goal of fostering cross-cultural awareness, as both aim to broaden understanding and promote collaboration across diverse fields and cultural contexts. By merging insights from distinct disciplines, individuals can develop a deeper appreciation for cultural diversity, which is essential for addressing complex global challenges and succeeding in a multicultural world.

Considering the evidence presented by Lenoir (2023), Reić and Kovačević (2023), and Rekha (2022), it is imperative for educational systems to actively promote the integration of interdisciplinary learning to better equip students with essential skills for lifelong adaptability, while addressing the structural limitations identified by Didham et al. (2024) and Roth et al. (2023) that currently hinder this integration.

Moreover, researchers worldwide have explored various tools and methodologies in multidisciplinary education, with a particular emphasis on the role of animated films in primary education. This highlights the potential of animated films as a valuable resource for enhancing interdisciplinary learning, thereby facilitating a more engaging and effective educational experience for young learners. In their study on early intentional bilingualism Kayadibli-Oğuz and Çamlibel-Acar (2024) investigated language exposure through cartoons, Vereş and Magdaş (2020) reviewed the use of the educational animated film in primary education in Romania: Kozjek and Duh (2017) studied cross-curricular integration with the example of implementation of contemporary art in the eighth grade of primary school; Kenna and Waters (2017) discussed teaching geography through an animated lens; Żebrowski (2017) analysed the educational potential of animated films in Poland, and Mithans and Brumen (2011) examined language and intercultural education at the classroom level in primary education.

On the one hand, existing studies highlight the importance of cross-curricular integration; on the other hand, they indicate a need not only to evaluate how multimodal education supports both cross-curricular and cross-cultural understanding but also to identify the factors that affect information processing efficiency among primary education learners.

The role of multimodal education in cross-cultural understanding

Since the early 2000s, multimodality has increasingly gained attention across various disciplines that explore meaning, text, and communication. Multimodality is defined from one of two perspectives: it can refer to the presence of multiple modes within a specific context or to the process of interpreting these coexisting modes from the perspective of a viewer or reader. In multimodal studies, the term "mode" is sometimes also associated with physiological or sensory channels, such as sight (visual mode), hearing (auditory mode), touch (tactile mode), smell (olfactory mode), and taste (gustatory mode) (Tuominen et al., 2018).

Šrot et al. (2023), and Aden and Theodotou (2019) investigated the advantages of multimodal teaching and learning in primary education. Li et al. (2022) and Cárcamo et al. (2016) highlighted the benefits of multimodal approaches to vocabulary teaching, showing that students who received multimodal instruction not only retained more vocabulary but also forgot words at a slower rate.

In addition, in her pilot study on teaching culture and developing cultural diversity awareness and intercultural communicative competence in schools with English as the medium of instruction, Ger (2022, 106) claims that when discussing the teaching of culture in language education, it is essential to define the different aspects of culture. This scholar refers to different practitioners and researchers who reported that some language teachers associate culture with "history, geography, literary works, or works of art" (2022, 111). In other words, this refers to examples of using culture-bound elements in the classroom to promote cross-cultural awareness and support foreign language acquisition.

The delineation of culture-bound elements

There are differing definitions related to culture-bound elements. The first one is known as "Culture-specific references" (further CSRs) - elements within a text, film, or other media that are deeply rooted in the cultural context of a particular society. Researchers largely agree that these references often rely on shared knowledge, history, traditions, and social norms that are specific to that culture. They can include historical events and figures, idioms and proverbs, popular culture, customs, and traditions, and cultural humour.

The second widespread classification of culture-bound elements is referred to as "Culture-Specific Items" (further CSIs). These items encompass tangible and often

concrete objects, concepts, or phenomena that are unique to a particular culture. CSIs may include material aspects such as food and drink, clothing, architecture, currency, traditional tools, and religious or ritual artifacts.

In contrast, Culture-Specific References (CSRs) pertain to historical events, notable figures, idioms, customs, or popular symbols that, while lacking a physical form, carry significant cultural meaning. CSRs focus more on the abstract and contextual elements inherent to a culture. Thus, while CSIs represent tangible objects or concepts that are culturally specific, CSRs emphasize the intangible aspects that define cultural identity. Both CSIs and CSRs are crucial in conveying the unique attributes of a culture; however, they differ in their nature and the ways in which they are perceived or translated across cultural boundaries.

Discussing CSIs, Newmark suggests the following categorisation of Culture-specific words: *ecology; public life; social life; personal life; customs and pursuits;* and *private passions* (Newmark, 2010). According to Newmark, the category of *ecology* encompasses CSIs referring to the geological and geographical environment, e. g., ecological and geographical environment such as hills, sea, mountains, cities, and states, etc. The category of *Personal life* includes "food, clothing and housing." *Customs and pursuits* includes body language, hobbies, sports, and the related national idioms, such as gestures, postures, and facial expressions specific to cultures, bungee-jumping, trekking, jogging, wrestling, football, soccer, etc. *Public life* refers to politics, law, or governmental patterns, e. g., political parties, liberal or socialist governments, specific laws like no chewing gum on streets, etc. *Social life* encompasses "economy, occupations, social welfare, health and education." *Private passions* refer to religion, music, poetry, and their different social organisations, e. g., Buddhism, Taoism, reggae, folk songs with their titles, Shakespeare's sonnets, etc. (Newmark, 2010).

Meanwhile Díaz-Cintas and Remael (2020) offer the following division of CSRs: (1) *Geographical referenc*es: to certain phenomena; to physical, general locations; to physical, unique locations; to endemic animals and plant species; (2). *Ethnographic references*: to food and drinks; to objects from daily life; to work; to art, media and culture; to groups; to weight and measures; to brand names and personal names; (3) *Socio-political references*: to administrative or territorial units; to institutions and functions; to socio-cultural life; to military institutions and objects; to personal names and institutional names.

Ultimately, since language and culture are intertwined, and they cannot exist without

each other as languages represent cultural elements and shape culture itself, it is important to explore how new concepts are learned and to measure the cognitive demands on individuals when they encounter unfamiliar cultural elements.

Methodology

This experiment followed a previous study by Huber and Kairys (2021), which investigated issues of CSIs and cultural equivalence in translated animated films. One of the mixed methods employed in that research was a qualitative survey method, which tested the translation preferences of two groups: adolescents (15- to 16-year-old students) and adults (including teachers of various subjects), with a total of 455 respondents. The study found that adults preferred films where culture-bound elements were adapted to their own culture, while adolescents were more open to the source culture and did not clearly favour content adaptations. Based on these findings, the author of the current study created a multimodal corpus of five animated films aiming to assess how primary school learners understand culture-bound elements and to measure their cognitive load in cross-cultural awareness when viewing both subtitled and dubbed excerpts containing CSIs.

Multimodal corpus

The corpus included the following American animated material: animated comedy-drama film *Ratatouille* (2007), an animated superhero comedy film *Megamind* (2010), the animated science fiction comedy film *Mr. Peabody & Shermann* (2014) and an American animated coming-of-age fantasy film *Luca* (2021). The selection of excerpts from these films was based on the following criteria: multidisciplinary elements, representation of culture and examples of diverse and distinctive cultures through culture-specific items (CSIs) and culture-specific references (CSRs).

Aim and Objectives

The *Aim* of the research was to explore the effectiveness of using animated films as a tool in primary education for enhancing cross-cultural awareness among primary school learners.

Specific objectives:

-to assess how animated films can broaden young learners' perspectives on diverse cultural practices, values, and traditions;

-to investigate how primary school children learn cross-cultural concepts and foreign words by analysing their eye movements in response to visual and textual stimuli, and identify the factors that influence the efficiency of their information processing, particularly in complex cross-cultural contexts;

-to determine young learners' learning preferences: learning acquiring cross cultural awareness through single-modal vs multimodal interventions.

Methods

In this study, triangulation was used, which involves employing at least two different research methods to gather and analyse data within the same study. The experiment was conducted utilizing the Tobii Pro Glasses 3 eye-tracking device. A questionnaire was administered to corroborate the eye-tracking findings, and an analysis was conducted to investigate how primary school learners perceive culture-specific elements that were incorporated in animated films.

A supposition was made that this eye-tracking experiment would provide valuable insights into how children learn cross-cultural concepts and/or foreign words by tracking their eye movements as they interacted with visual and textual stimuli. Additionally, it was assumed that this would provide understanding of how efficiently they process information and identify which elements might cause distraction or confusion, particularly in intricate cross-cultural settings.

Study participants and instruments

The participants were twenty primary school students, younger learners from one of the schools in Lithuania, where primary education pedagogy is combined with advanced foreign language instruction.

The instruments included *Prepared excerpts;* an *Eye-Tracking Device* and *Questionnaires.*

Sixteen video excerpts were prepared in total, comprising eight dubbed and eight subtitled clips—two from each selected animated film. The length of the excerpts varied from 18 to 46 seconds. Twenty primary school learners participated in the study, with 16% aged 8-9 years and 84% aged 10-11 years. Fifteen (15) participants were native Lithuanian speakers; seventeen (17) participants were able to communicate in English on a lower intermediate or mid-intermediate level, and five (5) participants were native speakers of either German, Ukrainian, Italian, or Spanish.

An assumption was raised that subtitled episodes would require extra cognitive effort and divert the viewer's visual attention away from the moving image but also

would encourage revisits, especially in cases of culture-bound elements. Meanwhile in the case of dubbed excerpts, the research participants would make shorter or fewer revisits, since the source text would be muted and culture-specific elements localized in the target language.

To ensure that the respondents understood the questions they agreed to answer after the experiment, a historical or visual representation was included as a supplement to the questionnaire.

Eye-tracking software was used to collect data on younger learners' gaze location and duration. Eye-tracking utilized two primary eye-tracking metrics — fixations and visits (revisits) — to evaluate younger viewer's understanding of culture-specific items and culture-specific references in animated films. All information was collected by means of an initial questionnaire comprising fifteen (15) closed and five (5) open questions, designed to be answered by the younger viewers.

Culture-specific items traced in the corpus

Ratatouille (2007) tells the story of Remy, a rat with an extraordinary sense of taste and smell, who partners with Linguini, an inexperienced kitchen worker, to pursue their shared passion for cooking in a renowned Parisian restaurant. The title of the film itself is a reference to a classic French dish, *ratatouille*, a vegetable stew from Provence. The film features numerous iconic Parisian landmarks, including the Eiffel Tower, Notre-Dame Cathedral, and the Seine River. These visuals establish a keen sense of place, highlighting the romanticized view of Paris as a center of art, culture, and cuisine. Many of the characters have distinctly French names, such as Remy, Linguini, Colette, and Gusteau. The film occasionally uses French phrases and accents, particularly with the character of Chef Skinner, who embodies many stereotypes of a fiery, temperamental French chef. The character of Gusteau is inspired by real-life French chefs like Auguste Escoffier, who is often considered the father of modern French cuisine. Anton Ego's character is a reference to the stereotypical French food critic—sharp, discerning, and feared in the culinary world. His name, "Ego," plays on the idea of a critic's ego influencing their judgments, a common trope in both real and fictional depictions of critics. The film highlights various classic French cooking techniques and ingredients, such as making sauces, preparing vegetables, and the importance of fresh, high-quality ingredients. The meticulous attention to detail in the kitchen scenes reflects the reverence for culinary traditions in France.

The scene where Anton Ego tastes the ratatouille and is transported back to his childhood is a hinted allusion to the *madeleine* of Proust, from Marcel Proust's novel *In Search of Lost Time*. It refers to the way certain tastes and smells can evoke powerful memories, a deeply French concept.

Megamind (2010) follows the adventures of a super-intelligent alien supervillain named Megamind. The film is action-packed, infused with humour, and carries major themes such as battling evil, transforming villains into positive figures, and looking out for one another. The character Metro Man is a direct reference to Superman. His powers, origin story (sent to Earth as a baby from another planet), and even his disguise as a mild-mannered civilian all parody classic Superman lore. The film features iconic rock songs such by AC/DC, Guns N' Roses, and Ozzy Osbourne. Megamind's frequent use of the word "Presentation!" when unveiling his plans is a playful nod to the theatricality and melodrama often associated with villain monologues in pop culture. The selection of culture-specific items (CSIs) for analysis was guided by the film's interesting names, nicknames, place names, and a range of common expressions, including slang.

In the animated film *Mr. Peabody & Sherman* (2014), culture-bound elements include historical figures, events, idiomatic expressions, or cultural practices that are integral to the storyline but may require localization or explanation when presented to an international audience. The plot often revolves around correcting historical events that have been disrupted, a common trope in time travel fiction. Mr. Peabody's character is consistent with his portrayal in the original series as a hyper-intelligent, polymath dog who excels in various fields. The name "Sherman" is a subtle reference to General William Tecumseh Sherman, a Civil War general, linking the character to American history. Mr. Peabody and Sherman visit Leonardo da Vinci's studio, where they encounter the artist working on the Mona Lisa. The scene humorously portrays da Vinci as struggling to get Lisa to smile, referencing the famous painting's enigmatic expression. The duo interacts with George Washington during the American Revolutionary War, a playful hint at the importance of this historical figure in American history. The movie references Einstein and his theory of relativity, humorously using it to explain time travel and other scientific concepts. Peabody and Sherman participate in the events of the Trojan War, including the famous story of the Trojan Horse. The film references these well-known myths while adding its own comic twist. The Greek hero Agamemnon is portrayed in a comical light, playing on the tropes of ancient warriors as depicted in epic literature and modern adaptations.

The time machine in the film, the "WABAC," is a play on the word "Wayback," referencing both the idea of going back in time and the original spelling used in the 1960s TV show.

Luca (2021) is set on the Italian Riviera in 1959. The film follows Luca Paguro (Tremblay), a young sea monster boy who can transform into a human while on land. Alongside his new best friends, Alberto Scorfano (Grazer) and Giulia Marcovaldo (Berman), he embarks on a life-changing summer adventure in the town of Portorosso, which is inspired by the real-life coastal villages of the Italian Riviera, particularly the Cinque Terre region. The narrow streets, colourful houses, and picturesque landscapes reflect the traditional architecture and scenery of these Italian fishing villages. *Luca* is rich with cultural references that are deeply rooted in Italian culture, as well as broader European and global influences. Characters frequently use Italian phrases and expressions, food, religious imagery, such as such as statues of saints in homes and public spaces, reflecting the deep-rooted Catholic influence in Italy. The characters' obsession with "Vespa" scooters is a nod to the iconic status of the Vespa in Italian culture. The cat in the movie is named Machiavelli, after the famous Italian Renaissance political philosopher Niccolò Machiavelli, author of *The Prince*. Giulia Marcovaldo points to a famous book by Italo Calvino, *Marcovaldo*, which features stories about a man living in a big city—an allusion to the juxtaposition of city and rural life. The film makes a subtle allusion to *Pinocchio,* the classic Italian tale by Carlo Collodi. The soundtrack includes classic Italian songs that add an authentic Italian flavour to the film, connecting it to the country's rich musical heritage.

The films selected for the corpus yielded the following culture-specific items, with the statistics of the types displayed in Figure 1 below:
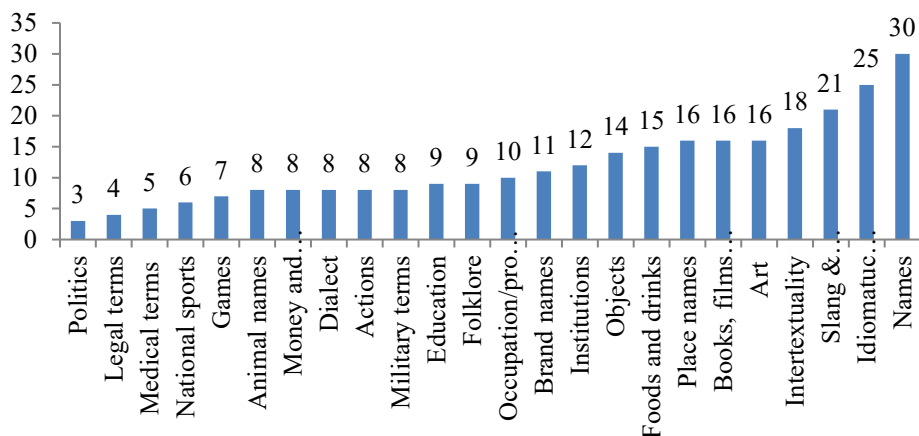
Figure 1
Types of CSIs found in Ratatouille (2007), Megamind (2010), Mr. Peabody & Shermann (2014) and Luca 2021)

Source: created by the author, L. H.

Results and discussion

The results of the study were grouped in accordance with the objectives raised.

> *(1) To assess how animated films can broaden young learners' perspectives on diverse cultural
>   practices, values, and traditions.*

The responses obtained from the research participants indicate that 85% of the
primary school students learned one of the following culture-specific items: new
concepts, cultural practices, values, and traditions.

Meanwhile 15% of the respondents recognized one of the culture-bound references,
such as brand names, foods, games, manners and others that were familiar to the
younger viewers. These included "Jean Paul Gaultier's Pour Homme," "Easter
bunny," "A yin with no yang" noticed in *Megamind*; "the Eiffel Tower" and "Notre-
Dame Cathedral" shown in *Ratatouille*; "Leonardo da Vinci and The Mona Lisa, King
Tutankhamun, and Albert Einstein depicted in *Mr. Peabody & Shermann*, and
"Trenette al pesto," and the iconic "Vespa" scooter in *Luca*.

The results of the study also revealed how well children connect language learning
with cultural understanding. When younger learners focused on cultural icons or
language-specific contexts within images or text, the data obtained suggests they

were linking language with its cultural context, an essential aspect of deep learning in both areas. The responses to the questions they were asked to provide after the experiment indicate that the young learners were able to recognize some culture-bound elements that are deeply rooted in Italy and France. This may account for their knowledge of European landmarks. Meanwhile, the biggest difficulties occurred with recognizing the American values and culture-bound elements in *Megamind*. When asked to name one word the respondents remembered, it was "Presentation." In addition, the young learners indicated that they had previously heard the songs/melodies played in the films, though unable to name them. These results imply that the young learners from Lithuania are likely to be more familiar with European languages, art, holidays, and traditions because of travel, media, and the shared cultural context of Europe. In the cases where the audio track from *Megamind* was played, three participants noted that they recognized the music but could not identify its source or recall additional details about the soundtrack. However, their responses suggest that they had likely watched the film previously with parents or family members, who may have discussed certain aspects to help the young learners understand its meaning.

(2) *To investigate how children learn cross-cultural concepts and foreign words by analysing their eye movements in response to visual and textual stimuli and identify the factors that influence the efficiency of their information processing, particularly in complex cross-cultural contexts.*

The results obtained during the eye-tracking experiment indicated a shorter gaze because of the knowledge of foreign language(s) and/or culture-specific expression(s). In addition, in these cases the answers on the questionnaires revealed that the concept was well known to the research participant from other media or educational content.

In other instances when cultural transfer was achieved in dubbed versions of the selected material, revisits, or repeated fixation on areas of interest likewise occurred. The responses signified that those revisits or repeated fixations contributed to a deeper understanding of the concept and enhanced information retention.

It was noted that subtitles can be beneficial for viewers who are learning the language in which the film is originally spoken. Reading subtitles while listening to the original dialogue helped reinforce language skills and improve vocabulary, even though it required the ability to read quickly and simultaneously follow the visuals, which was harder for younger viewers or those with lower reading skills. Younger viewers aged 8-9 years showed a preference for dubbing with localized translation, as they noted

that they did not have an attention span adequate to follow subtitles. In addition, the answers received from the same age group pointed out that by introducing adapted references that are relevant in a local context, audiences can become more aware of similar concepts or references in other cultures. This led to a broader understanding of and curiosity about the source material and its original context. Thus, localized translation bridged cultural gaps by presenting foreign concepts in a familiar context. Eye-tracking data indicated that all participants noticed Areas of Interest (AOIs). The average fixation duration of participants on AOI that was connected to an unknown CSI was the longest, at 3.5 milliseconds. The number of visits to the first AOI on CSI ranged from 1 to 3, with an average fixation duration of 2.5 milliseconds. In cases of manners and the way of speaking, including episodes when the characters spoke dialect, although the character, such as the food critic Anton Ego or Saucier was visible on the screen for only two seconds, participants focused on it for nearly the entire duration it was displayed. This likely accounts for the low number of visits but a relatively high average fixation duration. Three participants were able to describe the role of the Saucier, but none could correctly name it, indicating partial understanding without full recognition.

In the example from *Luca* with *Trenette al pesto* served on the table, participants' gazes were initially scattered. Some were looking at the dish, others directed attention to the faces. Meanwhile in the episode with the father cooking the dish, the average fixation duration for *trenette al pesto* in a bowl was 2.27 milliseconds, with an average of six visits. In comparison, *trenette al pesto* in the father's hand had an average fixation duration of 1.34 milliseconds, with an average of three visits. This data indicates that participants not only noticed AOIs but also engaged with them sufficiently to remember the appearance of the dish. When young learners encountered unfamiliar or confusing concepts, they tended to have longer fixation times when compared to familiar concepts. Multiple revisits occurred when unfamiliar concepts were shown. The answers received via questionnaires indicate that young learners were trying to make sense of the information. Thus, repeated glances accounted for effortful processing of the content.

The responses obtained from participants in the experiment confirmed that visual and textual stimuli directly influenced their understanding of culture-specific items.

(3) *To determine young learners' learning preferences: learning acquiring cross cultural awareness through single-modal vs multimodal interventions.*

When speaking about the young learners' preferences, 99% of the respondents expressed a preference for multimodal interventions. 15% of the respondents indicated that some culture-bound concepts were known to them, since they had been introduced to them during lessons in English, history, world awareness, science, art or geography through single-modal interventions (visual aids, audio recordings, or reading and writing activities) and the use of multimodality when gaining cross-cultural understanding, enhanced overall comprehension. Younger learners relied heavily on visual elements (pictures, colours and the manner of speaking) when trying to understand new culture-bound concepts.

The results received from the experiment align with Kenna and Waters' (2017) belief that incorporating animated films into teaching curricula offers numerous benefits, as they promote a deeper, more detailed, and lasting understanding of the subject matter.

These findings also corroborate the outcomes of the study by Bergh and Beelders (2023) where the researchers concluded that the image assists in integration and understanding of the word text for unfamiliar or new concepts when it is done multimodally via colour and movement.

The eye-tracking data and questionnaire responses revealed that, while the visual elements were engaging, some unfamiliar terms and concepts in the dubbed excerpts were not always clear, even after localization. For example, the phrase "nursing school" in the sentence "So I borrowed a prop from a nearby nursing school" was localized as "medicinos mokykla" and translated back as "I borrowed skeletons from medical school."

Other examples include: "Yin-yang," which was retained in the localized version from *Megamind*; "Saucier," which was preserved in translation but sometimes localized as "sous šefas," back-translated as "sous chef;" "Goat cheese" referred to as "Tomme de Chèvre" in *Ratatouille*; "Old geezer", which alludes to Giza but was localized as "O galbūt aš tiesiog senas kvailys," translating back to "Or maybe I'm just an old fool" in *Mr. Peabody & Sherman*; and "Trenette al pesto" from *Luca* was preserved in the dubbed version as "I made your favourite – trenette al pesto."

In the given case *young learners' learning preferences* were expressed in the answers of the questionnaire, e. g., "I would not have understood what was referred to without the visual information," "I saw the doughnut Megamind was holding but would not have been able to understand 'yin with no yang' without the visual information."

Overall, the study results highlight that animated films are a valuable tool for fostering global sensitivity in primary education. They engage students both visually and emotionally, making complex cultural concepts more accessible and relatable. The findings of this experiment validate Kenna and Waters' (2017) conclusion and recommendations that as today's students grow up in a media-rich environment, teachers should deliberately offer them opportunities to critically engage with visual media.

Conclusion

The analysis indicates that incorporating culture-specific concepts from animated films significantly enhances cross-cultural awareness within interdisciplinary education. Specifically, the findings confirm that such integration enriches curricula by connecting language learning with cultural studies, art, media literacy, and social-emotional development. This holistic approach not only fosters a deeper understanding of diverse cultures.

This eye-tracking experiment explored how children learn cross-cultural concepts by monitoring their focus on various elements within animated films. By analysing where and for how long children direct their attention, valuable insights into their comprehension, learning strategies, and the interplay between language and culture were obtained. Additionally, eye-tracking techniques revealed how young learners interpreted social cues, such as facial expressions and gestures.

The experiment confirms that eye-tracking helps identify individual differences in how students process information and where they direct their attention, which can be used to develop personalized learning approaches.

These findings can inform the creation of more effective educational materials and strategies tailored to the needs of young learners, thereby enhancing their ability to understand and appreciate culture-bound concepts and cross-cultural diversity.

Ultimately, taking into consideration the fact that classrooms have become increasingly diverse in terms of culture, language, and learning abilities, understanding how to effectively teach all students is essential, and future research could be directed at content accessibility, inclusion, and diversity in primary education.

References

Aden, F., and Theodotou, E. (2019). Reggio Emilia and the arts approach: Two exceptional examples of multimodal learning in early years. *Journal of Global Education and Research*, *3*(2), 158–167. Doi: https://www.doi.org/10.5038/2577-509X.3.2.1050

Bergh, L., and Beelders, T. (2023). Red-letter Reading Days: An eye-tracking perspective on Dr Seuss' Green Eggs and Ham. *Journal of Elementary Education*, *16* (Spec. Iss,). Doi: https://doi.org/10.18690/rei.16.Spec.Iss.2984

Cárcamo, M. M. A., Romina Amanda Concha Cartes, R. A. C. C., Velásquez, N. E. E., and Larenas, C. H. D. (2016). The Impact of Multimodal Instruction on the Acquisition of Vocabulary. *Artigos Trab. Linguist.*, *55*(1). Doi: https://doi.org/10.1590/010318134842170942

Díaz-Cintas, J., and Remael, A. (2020). *Subtitling: Concepts and practices.* Routledge. Doi: https://doi.org/10.4324/9781315674278

Didham, R. J., Fujii, H., and Torkar, G. (2024). Exploring Interdisciplinary Approaches to Education for Sustainable Development. *Nordic Journal of Comparative and International Education (NJCIE)*, *8*(2). Doi: https://doi.org/10.7577/njcie.5877

Ger, S. D. (2022). Teaching Culture and Developing Cultural Diversity Awareness and Intercultural Communicative Competence in Schools with English as the Medium of Instruction: A Pilot Study. *Working Papers in Language Pedagogy WoPaLP, 17*, 106–134. Doi: https://doi.org/10.61425/wplp.2022.17.106.134

Huber, L., and Kairys, A. (2021). Culture specific items in audiovisual translation: issues of synchrony and cultural equivalence in the Lithuanian dub of "Shrek the Third" *Kalbų studijos = Studies about Languages, 1* (38), 5-16. Doi: https://doi.org/10.5755/j01.sal.1.38.24743

Kayadibli-Oğuz S., and Çamlıbel-Acar, Z. (2024). A Case of Early Intentional Bilingualism: A Close Examination of Context and Practices. *Journal of Elementary Education*, *17* (Special), 187–211. Doi: https://doi.org/10.18690/rei.4581

Kenna, J. L., and Waters, S. (2017). Teaching Geography through an Animated Lens. *Clearing House: A Journal of Educational Strategies, Issues and Ideas, 90*(4), 147-151. http://dx.doi.org/10.1080/00098655.2017.1328203

Kozjek Varl, K., and Duh, M. (2017). Prikaz medpredmetnega povezovanja na primeru implementacije sodobne umetnosti v osmi razred osnovne šole. *Journal of Elementary Education*, *10*(4), 377–397. Retrieved from https://journals.um.si/index.php/education/article/view/306

Lenoir, Y. (2023). Interdisciplinarity in basic education: interpretations, relevance and principles. In R. J. Tierney; F. Rizvi; and K. Ercikan (Eds.): *International Encyclopedia of Education* (Fourth Edition), Elsevier, pp. 267–280. Doi: https://doi.org/10.1016/B978-0-12-818630-5.03050-5

Li, W., Yu, J., Zhang, Z., and Liu. X. (2022). Dual Coding or Cognitive Load? Exploring the Effect of Multimodal Input on English as a Foreign Language Learners' Vocabulary Learning. *Frontiers in Psychology,13*. Doi: https://doi.org/10.3389/fpsyg.2022.834706

Mithans, M., and Brumen, M. (2011). Jezikovno in medkulturno izobraževanje na razredni stopnji osnovne šole. *Journal of Elementary Education, 4*(3), 71–86. Retrieved from https://journals.um.si/index.php/education/article/view/292

Newmark, P. (2010). Translation and culture. In B. Lewandowska-Tomaszczyk and M. Thelen (Eds.), *Łódź Studies in Language: Meaning in Translation* (pp. 171-182). Frankfurt am Main: Peter Lang.

Reić, A., and Kovačević, S. (2023). Interdisciplinary approach in teaching English for specific purposes. *International Scientific Conference on Economy, Management and Information Technologies*, *1*(1), 341–345. Doi: https://doi.org/10.46793/ICEMIT23.341R

Rekha, N. (2022). The Implication of Interdisciplinary Approach in Education – An Exploratory Study. *GBS Impact: Journal of Multi Disciplinary Research, 8* (2), 28-39. Retrieved from: https://www.journalpressindia.com/gbs-impact-journal-of-multi-disciplinary-research/doi/10.58419/gbs.v8i2.822203

Roth, J., Eilerts, K., Baum, M., Hornung, G., and Trefzger, T. (2023). Die Zukunft des MINT-Lernens – Herausforderungen und Lösungsansätze. In: Roth, J., Baum, M., Eilerts, K., Hornung, G., and Trefzger, T. (eds) *Die Zukunft des MINT-Lernens – Band 1*. Springer Spektrum, Berlin, Heidelberg. Doi: https://doi.org/10.1007/978-3-662-66131-4_1

Šrot, K., Duh, and M., Kordigel Aberšek, M. (2023). Metoda vizualnega odziva in otrokovo razumevanje etičnega sporočila literarnega besedila. *Sodobna pedagogika*, *74*(2), 78–95. https://www.sodobna-pedagogika.net/arhiv/nalozi-clanek/?id=2203

Tuominen, T., Jiménez Hurtado, C., and Ketola, A. (2018). Why methods matter: Approaching multimodality in translation research, in C. Jiménez Hurtado, T. Tuominen, and A. Ketola (Eds.) *Linguistica Antverpiensia, New Series: Themes in Translation Studies, 17*, 1–21. Doi: https://doi.org/10.52034/lanstts.v17i0.522

Vereş, S., and Magdaş, I. (2020). The Use of the Educational Animated Film in Primary Education in Romania. Literature Review. *Romanian Review of Geographical Education, 9*(2), 67–86. Doi: 10.24193/RRGE220204

Żebrowski, M. (2017). Educational Potential of Animated Films in Poland. *Panoptikum*, *25*(18), 106–119

Loreta Huber, PhD

Professor, Vilnius University Kaunas Faculty, Institute of Languages, Literature and Translation Studies, Vilnius University Kaunas Faculty, Muitinės Street 8, LT-44280 Kaunas, Lithuania, ORCID iD: https://orcid.org/0000-0001-5453-7995, e-mail: loreta.huber@knf.vu.lt

Profesorica, Fakulteta Kaunas Univerze v Vilniusu, Inštitut za jezike, literaturo in prevajanje, Fakulteta Kaunas Univerze v Vilniusu, ulica Muitinės 8, LT-44280 Kaunas, Litva, ORCID iD: https://orcid.org/0000-0001-5453-7995, e-pošta: loreta.huber@knf.vu.lt

NAVODILA AVTORJEM

Osnovni namen revije je povezati širok spekter teoretičnih izhodišč in praktičnih rešitev v izobraževanju ter tako spodbujati različne metodološke in vsebinske razprave. Uredniški odbor združuje strokovnjake in raziskovalce iz več evropskih držav in s tem želi ustvariti možnosti za živahen dialog med raznovrstnimi disciplinami in različnimi evropskimi praksami, povezanimi z izobraževanjem.

Revija za elementarno izobraževanje torej objavlja prispevke, ki obravnavajo pomembna, sodobna vprašanja na področju vzgoje in izobraževanja, uporabljajo primerno znanstveno metodologijo ter so slogovno in jezikovno ustrezni. Odražati morajo pomemben prispevek k znanosti oziroma spodbudo za raziskovanje na področju vzgoje in izobraževanja z vidika drugih povezanih ved, kot so kognitivna psihologija, razvoj otroka, uporabno jezikoslovje in druge discipline. Revija sprejema še neobjavljene članke, ki niso bili istočasno poslani v objavo drugim revijam. Prispevki so lahko v slovenskem, angleškem ali nemškem jeziku.

Sprejemanje člankov v objavo

Prejete prispevke najprej pregleda urednik/založniški odbor in ugotovi, ali vsebinsko ustrezajo konceptu in kriterijem revije.

1. Če prispevek ustreza konceptu in kriterijem revije, ga uredniški odbor pošlje dvema anonimnima recenzentoma. Članek, ki je vsebinsko skladen s konceptom revije, vendar ne ustreza drugim kriterijem, lahko uredništvo vrne avtorju, da ga popravi.
2. Avtor dobi recenzirani prispevek vključno z morebitnimi priporočili za izboljšave/popravke, v primeru zavrnitve pa z navedenimi razlogi zanjo.
3. Končno odločitev o objavi članka sprejme urednik na temelju priporočil recenzentov. Pri tem utemeljitve za svojo odločitev ni dolžan navesti.
4. Besedilo prispevka mora biti pripravljeno v skladu z Navodili avtorjem.
5. Avtor jamči, da so v prispevku predstavljeni podatki natančni, verodostojni in izvirni. Ko je članek sprejet v objavo, avtor podpiše Izjavo o etičnosti raziskovanja in Izjavo avtorja o izvirnosti prispevka. Vsi prispevki gredo skozi postopek za ugotavljanje plagiatorstva.

Navodila za oblikovanje besedila

Pri pripravi besedila prispevka upoštevajte naslednja navodila:

1. Tipkopis oddajte kot dokument v programu Microsoft Windows. Nabor pisave je Times New Roman, velikost črk 12 za osnovno besedilo in 10 za povzetka v slovenskem in angleškem jeziku, literaturo in citate, če so daljši od treh vrstic, razmik med vrsticami pa je 1,5. Velikost pisave v tabelah in naslovih tabel ter grafov je 10; razmik med vrsticami pa enojni. Širina tabele naj ne presega 12,5 cm. Besedilo naj bo obojestransko poravnano. Vodilni naslovi naj bodo zapisani krepko, prvi podnaslovi ležeče, drugi podnaslovi pa navadno. Naslovov in strani ne številčite in ne uporabljajte velikih tiskanih črk.
2. Besedilo prispevka naj ne presega 38.000 znakov s presledki, vključno s povzetki, literaturo in ključnimi besedami.

3. Naslov prispevka naj ne presega 15 besed in naj bo v slovenskem in angleškem jeziku.

4. Prispevek naj ima na začetku povzetek v slovenskem jeziku ter njegov prevod v angleškem jeziku (oziroma obratno) in naj ne presega 100 besed. Za povzetkom naj bo 5 ključnih besed. Poleg povzetkov naj prispevek na koncu prispevka, pred literaturo, vsebuje daljši povzetek (500-700 besed) v angleščini, če je članek napisan v slovenščini.

5. V prispevku ne uporabljajte ne sprotnih ne končnih opomb.

6. Vire navajajte v skladu s standardom APA (American Psychological Association). V seznam literature vključite samo v tekočem besedilu navedene vire, ki jih uredite po abecednem vrstnem redu.

7. V posebnem dokumentu pošljite naslednje podatke: ime in priimek avtorja, akademski naziv, organizacijo, kjer je avtor zaposlen, elektronski naslov, naslov bivališča in naslov prispevka.

Primeri:

Knjige: priimek, začetnica imena avtorja, leto izida, naslov, kraj, založba.
Duh, M. (2004). *Vrednotenje kot didaktični problem pri likovni vzgoji.* Maribor: Pedagoška fakulteta.

Članki v revijah: priimek, začetnica imena avtorja, leto izida, naslov prispevka, ime revije, letnik, številka, strani.
Planinšec, J. (2002). Športna vzgoja in medpredmetne povezave v osnovni šoli. *Šport*, *50*(1), 11–15.

Prispevki v zbornikih: priimek, začetnica imena avtorja, leto izida, naslov prispevka, podatki o knjigi ali zborniku, strani, kraj, založba.
Fošnarič, S. (2002). Obremenitve šolskega delovnega okolja in otrokova uspešnost. V M. Juričič (ur.), *Šolska higiena: zbornik prispevkov* (str. 27–34). Ljubljana: Sekcija za šolsko in visokošolsko medicino SZD.

Vključevanje reference v tekst: če gre za dobesedno navedbo, napišemo v oklepaju priimek avtorja, leto izdaje in stran (Lipovec, 2005, str. 9), če pa gre za splošno navedbo, stran izpustimo (Lipovec, 2005).

Prispevke avtorji oddajo na spletni aplikaciji:
https://journals.um.si/index.php/education/about/submissions.

MANUSCRIPT SUBMISSION GUIDELINES

The basic purpose of the journal *JEE* is to cover a broad spectrum of education theory and its implications for teaching practice, seeking to bridge and integrate diverse methodological and substantive research. The Editorial Board brings together academics and researchers from different European countries, who seek to promote a vigorous dialogue between scholars in various fields both central and related to scientific enquiry in education.

Articles accepted for publication in *JEE* should address an important, up to date issue in education, apply appropriate research methodology, and be written in a clear and coherent style. Accepted articles should make significant contributions to the field. In addition, *JEE* accepts articles which promote advances in education from closely related fields, such as cognitive psychology, child development, applied linguistics and others. *JEE* does not publish articles that have appeared elsewhere or have been concurrently submitted to or are already under consideration for publication in other journals. The languages accepted for the papers eligible for publication in *JEE* are Slovene and English.

Paper Acceptance Procedure

After a paper is submitted to *JEE*, the editor/publishing board first establishes if it is within the journal's domain of interests and meets the journal's requirements for style and quality.

1. If the paper meets the standard and the concept of the journal, it is sent to reviewers. *JEE* uses a double-blind review. Papers which are within the journal's domain but do not meet its requirements for style or quality, may be returned to the author for revision.
2. The reviewed papers are returned to the authors with reviewers' feedback and suggestions for improvement or an indication of the reasons for a rejection.
3. The decision regarding publication is made by the editor after considering the reviewers' recommendations. The editorial board is under no obligation to provide justification for its decision.
4. The text of the paper should be edited in accordance with the Submission Guidelines.
5. Authors must certify that the data cited in the article are, to the best of their knowledge, accurate, reliable and authentic. When the article is accepted for publication, the author has to sign the Publishing Ethics Statement and the Statement of Authenticity. Manuscripts will also be submitted to plagiarism detection software.

Preparation of Copy

Follow these instructions for the preparation of the manuscript:

1. Submit your manuscript as a Word file. Use Times New Roman: 12 pt, for main text and 10 pt, for abstract in Slovene and English, and for references and quotations of three lines or more. All text must be 1.5 spaced and justified. The fint size in table and diagram titles is 10; the line spacing is single. Maximum table width is 12,5 cm. The text should bi aligned on both sides. Use boldface type for first level headings, italics for second level headings and regular type for all other headings. Do not number headings. Do not number headings or use uppercase.

2. The length of your paper should not exceed 38,000 characters with spaces including the abstracts, bibliography, and key words.

3. The title of your article should not exceed 15 words. The title should be written in English and in Slovene.

4. At the beginning of the manuscript include an abstract (up to 100 words) in the language of the article, and its translation into the other language, followed by 5 key words. In addition to the abstracts also include a longer summary (about 500-700 words) at the end manuscript, before reference - in English if the article is in Slovene and in Slovene if the article is in English.Do not use either footnotes or endnotes.

5. Do not use either footnotes or endnotes.

6. Quote references in accordance with the American Psychological Association (APA) style. Include only the sources cited in current text, arranged in alphabetical order.

7. Send a separate document with the following information: author's name and family name, address, full title of the article, academic title, affiliation and e-mail address.

Example:

Books: last name and name of the author, year of publication, title, location, press.
Duh, M. (2004). *Vrednotenje kot didaktični problem pri likovni vzgoji.* Maribor: Pedagoška fakulteta.

Articles from Magazines: last name and name of the author, year published, title of the article, name of the magazine, year, issue number, page(s).

Planinšec, J. (2002). Športna vzgoja in medpredmetne povezave v osnovni šoli. *Šport*, *50* (1), 11–15.

Academic Journals: last name and name of the author, year published, title of the article, information about the journal, page(s).

Fošnarič, S. (2002). Obremenitve šolskega delovnega okolja in otrokova uspešnost. V M. Juričič (ur.), *Šolska higiena: zbornik prispevkov* (str. 27–34). Ljubljana: Sekcija za šolsko in visokošolsko medicino SZD.

Citing sources in the body of the text: If a direct quotation is cited, write the last name of the author, year it was published and page number. Put this information in parenthesis (Lipovec, 2005, pg. 9). If the information is paraphrased, leave out the page number (Lipovec, 2005).

Manuscripts should be uploaded at https://journals.um.si/index.ph–p/education/about/submissions.